Management in Homes

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Management in Homes

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Management in Homes

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To
the memory of Martha Van Rensselaer
and to Flora Rose
with the admiration, gratitude, and affection
of the author

PREFACE

This book deals with actual homes in which real people live. It contains stories of ambitions, of obstacles, of struggles, and of achievements in the making and the improvement of these homes. It is a record of the varied ways in which families have managed, that is, have used what they had towards getting the kinds of homes they wanted. It should, therefore, have some value for all those who have a real interest in homes and in making these more satisfying by the intelligent use of resources.

These glimpses of actual home life may give college students, home economics teachers, and adult study groups interested in home management an insight into the ways in which differently situated families have managed to achieve things important to them in the face of varied obstacles. From the experiences presented here teachers and students may learn how they may secure access to homes in order to study home management in action and how to work with families in solving some of their home management problems.

Families, too, may benefit from this record of other people's experience in utilizing friendly aid and suggestions for the solution of problems. They may also learn that there is satisfaction in rendering aid to students and teachers of home management by permitting the use of their own experiences as laboratory material.

Finally, the content of these pages represents a method of teaching home management and constitutes a body of teaching material that may add a welcome touch of reality to problems as varied as human nature itself.

It is hoped that the stories here presented will lead teachers, students, and homemakers to question set rules and standards for managing, and to see that no two families can possibly manage in exactly the same way in order to get out of life what they want. These recorded home experiences may make students more fully aware of the great individuality of family values and aims, and of the fact that resources, human and material, are never the same in two homes nor are they used in the same way, but that in every home good management involves reflective thinking. Such broader understanding should help both students and homemakers to manage more successfully in whatever situations they may find themselves.

While this book was written primarily for college students in home management, thought was given to the needs of adult study groups such as P.T.A., Home Bureau, and women's clubs concerned with home management problems. It is hoped also that it will prove of value to others: to homemakers, to homemaking teachers in high schools, to extension teachers, to social workers and home service directors of public utility companies, to builders and architects, to manufacturers of household equipment, and to others whose work is related to the management in homes.

The families and individuals whose achievements in home management are described in this book are located in New York State, largely in the vicinity of the New York State College of Home Economics at Cornell University, Ithaca, New York. The names of persons and places are fictitious.

Home management can be applied only in homes. Rules for home management have not been formulated in this book. The intention has been to return to the sources and to study homes as they are. The elements that appear to be common to successful management in all these homes can probably be regarded as principles of good home management. These principles can be seen at work in homes everywhere. The discussion of the fundamentals of home management, Chapter 14, is placed after the stories of management in real homes. Students or readers may wish to formulate for themselves the principles behind these actual experiences, or Chapter 14 may serve as a useful introduction to the more concrete material. An effort has been made to arrange the chapters so that information needed prior to home visits will be indicated in those Suggestions for Study and Investigation that follow the first few chapters. It is the author's hope, however, that this book will be used with the greatest possible flexibility.

The questions and topics for discussion are merely suggestions. They might be used as the nucleus of a college course in home management or for individual projects according to the students' special interests. Extension groups or women's clubs might select certain subjects for a study program. But in the main it is expected that those who use the book will wish to formulate their own questions and topics for investigation in line with their own needs and interests, and will consider the ones presented merely as signposts to the many lines of thought and investigation that the stories open up. No class or study group would or could wish to pursue them all, others might wish to pursue some that are not given. If they stimulate discussion and independent investigation, they have served their purpose.

A bibliography of reference books has been omitted. If desired, such bibliographies can be found in other books on home management. No specific factual matter is presented in this book and there is no limit to the lines of investigation that are suggested by the recorded family experiences or by the problems that may confront students in the homes they visit. It seems preferable for students to obtain their information from the library, the Reader's Guide, the subject matter of courses they have had, community resources, and their own experiences. Due to the character and organization of the book, because each story illustrates the procedure of home management, I have not included an index. Instead, the points of emphasis in each chapter have been summarized in the Table of Contents.

I am deeply indebted to Professors Martha Van Rensselaer and Flora Rose. During their term of codirectorship of the New York State College of Home Economics, they gave the full understanding and support that made this method of teaching possible. To Professor Helen Canon, Head of the Department of Economics of the Household and Household Management at Cornell, I owe particular gratitude for her continuing encouragement. I wish to thank her as well as my colleague Dr. Margaret Wiley, Extension Professor of Family Life, for their reading of the manuscript. Finally, Clarissa Fairchild Cushman has been so generous with her experienced help in editing the manuscript and in her constant challenge of the subject from the layman's point of view that I am deeply in her debt also.

The New York State College of Home Economics has generously given me permission to use the photographs that appear in this book. These are selected from a collection used in resident and extension teaching.

I hope the families who so generously shared their home management experiences realize how much they have done to make the subject of home management practical and vital to students. They made this book possible. To them the author expresses her deepest and sincerest appreciation.

E. M. C.

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Management in Homes

CHAPTER 1

THE CONTRIBUTION OF HOMES TO THE STUDY OF HOME MANAGEMENT

From each state land grant college, home economics instruction is extended to families throughout the state. The organization for this educational program for homemakers varies in the different states. In New York State the organization through which the extension service works in counties and communities is called the Home Bureau, and the representative of the State College of Home Economics and the Home Bureau is called the Home Demonstration Agent. Extension teachers from the college, known as specialists, help the Home Demonstration Agents, the local leaders, and the Home Bureau members to build an educational program, and they assist with the teaching of their own subjects such as clothing, economics of the household and household management, housing, family life, and foods and nutrition. Each year a special invitation is extended to rural families to attend lectures and demonstrations and to see exhibits at their state college. This is a big event in New York State and is called Farm and Home Week.

An extension teacher of home management was attempting to teach principles of management related to kitchen arrangement to a group of busy women who had come long distances to a grange hall for real help. She felt far away from these women, and when at last one woman said in desperation, "That wouldn't be practical in my kitchen. I just wish you could *see* my kitchen," the teacher responded, "Then why don't we all go over to your house and see it?" In a body, the entire group went to this woman's kitchen. There, it was perfectly obvious that the specific principle under discussion would not work in that particular kitchen. A lively discussion took place. The other women told how they had overcome similar difficulties and even asked for suggestions in connection with some of their own problems. From that time, the management conference in homes has been used almost universally in New York State extension teaching of home management. A group of homemakers gathers together informally in a home — usually, when the conferences first developed, in a kitchen

— to talk over ways of helping the homemaker solve some problem concerning which she has asked for help.

Simple as this method seems, it had its difficulties. Women were afraid that their necessarily make-it-do arrangements would be criticized, while at the same time they really wanted and asked for such a conference. The following incident illustrates this fear of criticism. A kitchen management conference was to be held in the home of a member of a county executive committee. A kitchen full of curious women was ready and waiting when the agent and the specialist arrived. Introductions were made; the atmosphere had the chill formality and much of the waiting hostility of a first day at school. The specialist felt suddenly desperate, as she became aware of the thick armor of defense around these women. What help could she be to them? How could she make them feel that she recognized that there were many right ways to do the same thing? Glancing around the kitchen, groping for help, she saw that it was really an interesting and individual kitchen. Her eye lighted upon a particularly clever convenience, and she spoke appreciatively of this evidence of good management. One could almost hear the armor clang as it fell away. From that lead, the specialist invited the hostess to tell the group something about the condition of the kitchen when they first moved into the house and what improvements the family had made. This gave the hostess an opportunity to shift the responsibility for any really bad arrangement from her own shoulders, and gave her confidence and satisfaction in the improvements that had been made. Discussion started unsolicited; the group learned who used the kitchen, how they used it, what the various preferences of the family were, what they found to be satisfactory, and what bothered them most. Women in the group told of their experiences and how they had overcome similar difficulties; some asked for suggestions for solving their own problems. When the meeting ended the hostess remarked in a friendly way: "I did not know it was going to be like this. I thought you were going to criticize my kitchen. This has been helpful. It has been fun."

From struggling with the difficulties of kitchens the groups progressed to other parts of the house. Now, management conferences are held in cellars, laundries, bathrooms, back rooms, attics, playrooms, sewing rooms — anywhere, or rather, everywhere. Difficulties and how to overcome them are the subjects of discussion. The homemakers understand the all-inclusiveness of home management, and this in turn they have taught the teachers. The specialists learned that even the simplest problem in home management is bound up with time and motion economy, with money matters, with foods and nutrition, with housing, clothing, family relationships, and half a dozen other intermingled and kindred things. Homemakers have unconsciously demonstrated that home management is a procedure in which they can use wisely only what they have or can get, in their attempt to make the kind of home they want.

A series of management conferences in a county is often followed by a county tour to homes in which changes have been made that contribute to better home living. Farm homes, village homes, and city homes are visited, homes of high income and of low, homes with large families and homes without children, homes in which extensive improvements have been made at considerable cost, and homes improved by family labor at no cost. When driving was possible, such a tour was a real event in a county. Advance newspaper publicity preceded it for days, whole families turned out, and often a chartered bus joined the procession, carrying the high school homemaking teacher and her students, both boys and girls. Each car carried its Home Bureau placard. It was fun to count the cars, fun to be led through traffic lights by mounted police who preceded and followed the procession to keep the cars in line. And more excited still were the families who were to be visited. They felt honored by being selected, and no one ever refused this honor.

But it was not alone the honor of the occasion that made them work for days to shine their houses, that made their husbands arrange to be at home to explain some clever device they had created to make life easier and more fun. It was also the conviction that they had done something that was not only a benefit to themselves but also a contribution to others in the community. The family members who explained why changes had been made did more inspired teaching than any specialist or college instructor could possibly do. They taught with conviction because they had concrete evidence to prove their point. They told why the change had been made, what it had cost in labor and money, and what they expected to do next. They answered questions generously, and often arranged to let total strangers return to examine some clever device more carefully in order to learn just how it was made. On the next tour other homes would be visited, and, in their turn, the first hostesses would be the tourists. The value of the tour as a teaching method is evidenced by its wide use throughout the country in extension teaching in both agriculture and home economics.

When the author was invited to teach a college course in home management, she was encouraged to use the teaching methods she had used in her extension work. At that time she had held management conferences in nearly a thousand homes in the state, and some of these homes she had visited a number of times, so that she felt confidence in these methods. Such an undertaking has required — and received — the wholehearted cooperation of families, Home Demonstration Agents, extension specialists, and other college staff members.

Arrangements are made for a few students at a time to accompany an extension specialist on a management conference, first, to broaden their understanding of the kinds of problems families are facing and to see how the combined efforts of the family or the group can iron out many of these difficulties, and second, to see this type of teaching in action. Home Demonstration Agents and specialists cooperate in organizing county tours for students. Management conferences for students are held by the instructor in students' rooms and in homes near the college where help has been requested. Some of these home conferences develop into projects in which students divide into groups and assist the homemaker in planning or carrying through to completion some desired change. Homemakers often tell students of their own management experiences from the time of their marriage or before. They tell what was most important to them in establishing a home, what resources they had or expected to have to make the kind of home they wanted a reality, and to what extent they have accomplished their aims. They tell of the obstacles they encountered, of the choices that presented themselves, of how they investigated, experimented, and weighed values before making decisions. Sometimes, too, they explain how they were forced to change or abandon their plans, permanently or temporarily. They give their problems reality by facial expression and tone of voice quite as much as by words.

The homes described in this book have been visited by students participating in a course in home management at the New York State

College of Home Economics at Cornell University. In some they have helped to overcome obstacles to successful home management. The greatest possible variety of home situations has been selected to help break down any feeling that there is one right way to manage. There is no intention on the part of the author, or of the families discussed, to give the impression that these are ideal homes, ideally managed. All families manage poorly at times and well at times, manage poorly about some things and well about others. These families are no exceptions. In general, however, they have succeeded unusually well — considering their problems — to get what they wanted most. Nor are the illustrations pictures of ideal, model, or perfect situations. In some instances the reader may be tempted to criticize, and may feel that a different arrangement would be better. But one must know why the present arrangement exists to pass judgment with fairness. It may have been found by experiment to be the best possible arrangement because of some factor unknown to the reader, or the homemaker may not be aware of the inconvenience that seems apparent to the outsider. Often an inconvenience must be accepted to avoid a greater one. The illustrations are taken of situations as they are.

It should be apparent to the student of these family studies that changes in material things in the home can bring satisfactions far out of proportion to the importance of the things changed. It is not the rich only who are the "slaves of their possessions." No one is immune to that slavery. To walk unnecessary miles around a kitchen table, to dodge and never forget to dodge a cupboard door, to have this thing too high and that thing too low, and always to have to dig one thing out from behind another — such inconveniences are apparently so insignificant that we forget or ignore the mounting burden of their daily recurrence. It was not accidental that "the total depravity of inanimate things" became a proverb. These families illustrate what can be done when there is a will to make things servants and companions instead of masters.

SUGGESTIONS FOR DISCUSSION AND INVESTIGATION

1. Investigate the home economics extension service in your state and county. Become acquainted, if possible, with your Home Demonstration Agent and your state specialist in home management. Find out if there are local

leaders in home management, how they are chosen, and what their function is. Find out about the extension program in home management in your county.

2. Invite the Home Demonstration Agent of your county, the state extension specialist in home management, or a local leader in home management to talk to your class or group about some of the most common management problems in the homes they visit. Compare these with those in your own home.
3. Make arrangements to visit a home management extension meeting held in a home.
4. Secure lists of home economics bulletins published by your state agricultural college, by your state experiment station, and by the United States Department of Agriculture at Washington, D. C. Refer to these lists as you proceed further in this book, and send for those that apply to your special needs and interests.
5. If possible, become acquainted with the reference librarian in your college or city library. Ask her to talk to your class or group about her work and see how her work applies to home management.

CHAPTER 2

THE AVERYS MANAGE ON A MODERATE INCOME

Mrs. Avery asked a home management extension specialist to conduct a kitchen management conference in her home. She invited a group of neighbors, and at the request of the college instructor in home management asked five home management students to attend. Later the instructor made arrangements with Mrs. Avery to bring her entire class to the house. This was the first of many such class visits to Mrs. Avery's.

Mr. and Mrs. Avery, after moving from one house to another three years in succession as their family increased, decided to buy an old farmhouse and two acres of land they had found just beyond the city limits. Mr. Avery was a professor of plant science at the state college in the city of X, and Mrs. Avery had done graduate work in the same field. They now had two children, Mary ten years old and Tom four. A student boy worked for his room, and sometimes Mr. Avery's father paid a short visit. For a permanent home, a farm was their first choice.

Renting for three years had been what renting usually is: not too bad but by no means perfect. At first they lived in a four-room furnished apartment in the city; but after six months they were able to buy furniture for four rooms, and they moved. Then Mary was born, and so they took an eight-room house; it was the only house available, but it had no yard and the neighborhood was noisy. They were more fortunate in their fourth place, an eight-room house which restricted neither their indoor nor their outdoor activities; but, unexpectedly, the owner needed it for his own use.

By now the Averys knew what they wanted. They wanted permanence. They wanted a place they could call their own, a place where both children and adults could find things to do and have space in which to do them, a place which would give them the advantages of independent living without too many of its disadvantages. They wanted a home big enough for all to move around in freely in the pursuit of their personal interests, yet small enough so that Mrs. Avery could run it comfortably without permanent help. Most of all, they wanted land enough to give the children freedom and to allow scope for the family hobby of gardening.

But there were practical considerations. It must be accessible to Mr. Avery's work, to a good school for the children, and to a marketing center; and it must be within their financial reach. They considered an $8,000 house in a section of the city where other professors' families lived; but the lot was so small that if they were to have any lawn at all they would have to sacrifice both garden and play place for the children. Another, a $12,000 house, they almost bought. It was new, clean, and convenient; it had a large yard to accommodate both the children's playground and the family's garden. However, it was a new house, and the Averys feared that they would be tempted to say: "Don't do that because it will spoil the house." For instance, would they want the children to paste up their works of art on the new woodwork and walls? Just as the first house would have restricted the children's outdoor activities, this house might restrict their indoor activities. They looked at farms eight or ten miles out in the country. But the only one possible was a hundred-acre farm, and this was more land than Mr. Avery could care for with his work at the college. Moreover, city stores did not deliver so far out, and the children would have to attend a one-room country school.

Finally they discovered their present house. The school bus picks up the children at the door and takes them the four miles to an excellent grade school in the city. The hundred-year-old house spreads low and white on a two-acre lot of rich sandy soil, trees shelter it, a little stream runs through the land, there is ample room both for gardening and for baseball. Marketing offers no problem, for there is a call-and-delivery service in that section and the week-end bargains advertised by chain stores can be bought in large quantities when one of them is in town with the car. Moreover, the city is gradually creeping out to this location and should they ever wish to sell, the resale value of the place would be at least equal to the cost price. The fact that the Averys could afford only one car was a serious consideration; but they were free to use the school bus or, if Mrs. Avery wanted the car, she could drive her husband to and from his work.

Having decided to buy this place, it was natural, since Mr. Avery was a professor at the college, for Mrs. Avery to turn to the college for help and suggestions for remodeling. When the annual week of exhibits, demonstrations, and lectures for rural families was in progress at the State Colleges of Home Economics and Agriculture, Mrs. Avery attended. There she found, on exhibit in the home management laboratory, the kitchen of the Boyds, friends who had also recently purchased an old farmhouse (Figs. 221–227). On inquiry it developed that Mrs. Boyd had received help in planning her kitchen from the college class in home management. The exhibit, set up with wall panels and equipped and furnished with homemade, second-hand, or borrowed equipment, represented the general arrangement which had been tentatively agreed upon by the Boyds and the students working together. Mrs. Avery was quick to ask for similar help. The extension specialist called on the Averys to become acquainted with the family and to see the kitchen and the problems it presented, in order to know how best to conduct a conference.

The conference on the kitchen was held in the fall, some little time after the Averys had moved in and had already made what they thought of as temporary shifts to make the kitchen do until they could afford to "modernize" it. They expected that this would cost about $500, and for that project Mrs. Avery would want advice again. Five students and the extension specialist came to the conference, and Mrs. Avery had asked in a few Home Bureau members.

Mrs. Avery explained what she wanted in a kitchen, what resources had been available, and what she used. She said frankly that she did not care for housework, and that her major interests were outside the kitchen. She therefore wanted the kitchen arranged and equipped to make work as simple and easy as possible, and to permit several persons to work in it at the same time without confusion. There were two reasons for this last stipulation. In the first place, while the children had not as yet helped much with kitchen work she thought that if the kitchen were planned to make their share of work enjoyable, they might want to do so; and in the second place, if she could inspire her guests to help, she could do much more informal entertaining.

Since they were planning to modernize the kitchen, they had spent very little on temporary conveniences. The room had been designed originally for a bedroom, but the former owners had used it as a

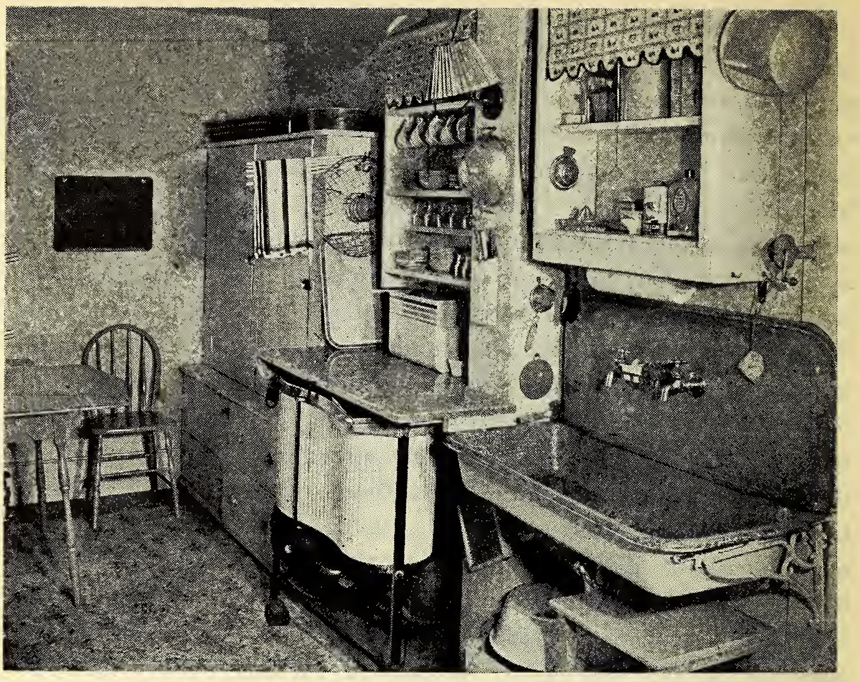

FIG. 1. Mrs. Avery's kitchen, from the dining room door. The gray granite sink fits pleasantly into a gay color scheme, and its 3-foot length is useful in laundering.

kitchen. Its only equipment had consisted of a sink and two cupboards, one built in and one movable.

The room was 8-by-18 feet, with a door to the dining room at one end and a window opposite (Figs. 1, 2). A door to the living room was on one long wall and on the opposite wall was an outside door. At the left of the outside door was the sink, and to the left of that had stood the movable dish cupboard. To provide counter space beside the sink, the Averys had already moved this cupboard to the corner of the room (Fig. 1), and between sink and cupboard Mr. Avery had put a movable shelf, with room beneath it for the washing machine. They had placed an unused bookcase over this counter, and here they kept the breadbox and the dishes used at the kitchen table. Mrs. Avery kept her everyday dishes in this open cupboard rather than in the built-in cupboard, for though the built-in cupboard was more convenient to the dining room (Fig. 2), it was less convenient for putting away dishes after they were dried and it was awkwardly

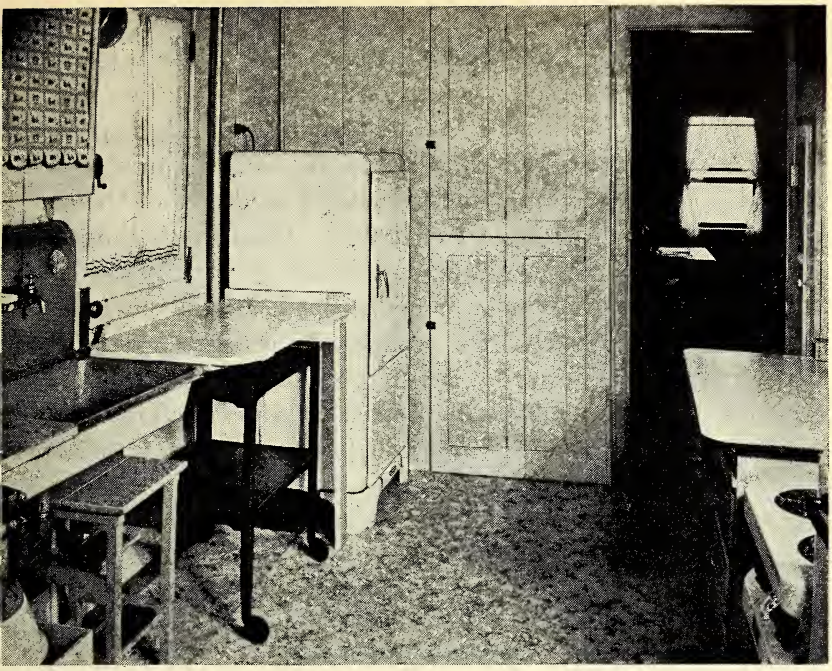

FIG. 2. Mrs. Avery's kitchen, with the dining room beyond. The sink-shelf in front of the outside door is hinged so that it will tilt up against the refrigerator at right.

high for the children to use. A service wagon cut down the labor of this longer trip with the everyday dishes, and in the built-in cupboard she stored her best Wedgwood china, which was seldom used.

By a simple twist of the wrist, Mrs. Avery said, dishes could be dried, and either shut into the cupboard or concealed behind the gay oilcloth window shade; a stepladder, kept under the sink, made the higher shelves accessible to the children. A pin-up lamp on the enclosed standpipe provided good light at the sink and counter. Dishwashing equipment was arranged conveniently around the sink. Placing the refrigerator in the corner near the dining room door made it accessible to that room as well as to the sink and the cabinet opposite (Fig. 2). Between the refrigerator and the sink, and in front of the outside door, Mr. Avery had built a hinged shelf. On this, food could be set on the way to and from the refrigerator and dishes stacked ready for washing, and the service cart could be stored underneath. For ordinary coming and going the family used the playroom door, but to make this kitchen door available, as on washday, the shelf could be lifted and tilted against the refrigerator. The hinged shelf, sink, and counter formed a continuous working surface on that side of the room. This was, Mrs. Avery thought, especially important if the children were to help with the work, because pushing dishes instead of picking them up and carrying them decreased the danger that they would be dropped and broken. Also it made possible the assembling of things for use where needed.

Mrs. Avery called attention to her mixing center on the wall opposite the sink (Fig. 3). Here they had placed the base section of an old kitchen cabinet between the electric range on the right and an open cupboard on the left. The cabinet had been too low for her to use comfortably, so her husband had raised the counter to the height she had found, by experiment, to be most satisfactory. He had also widened the counter by a narrow shelf at the back, and with brackets had fastened another open bookcase over this at the height most convenient for her. In this she kept her baking supplies used at the counter, and in the shelves on the left most of her working utensils. Two breadboxes on the cabinet contained flour and sugar. Over the stove she had hung her skillets and some of her saucepans.

Mrs. Avery said that she had found baking at this center very simple and easy, but wondered if it could be improved? One girl suggested that since her shelves were rather far apart there was some wasted space, while certain utensils had to be stacked and some placed in front of others. A narrow shelf between the two wide ones might help remove this difficulty. Another student suggested that the stacked baking tins might be more easily accessible if placed in a vertical file, especially if this file were placed on the top shelf where the bottoms of the tins would be within easy reach while the tops would occupy space that would otherwise be inaccessible. She showed Mrs. Avery a construction model of such a file (Fig. 211), and photographs of similar improvements in other kitchens. As the photographs show, the Averys later incorporated these conveniences in their open cupboards, after determining the most convenient place for each article.

When Mary was twelve, Mrs. Avery reported that Mary put up the school lunches for herself and Tom; that occasionally, with some help, she baked a cake or muffins; and that during vacations,

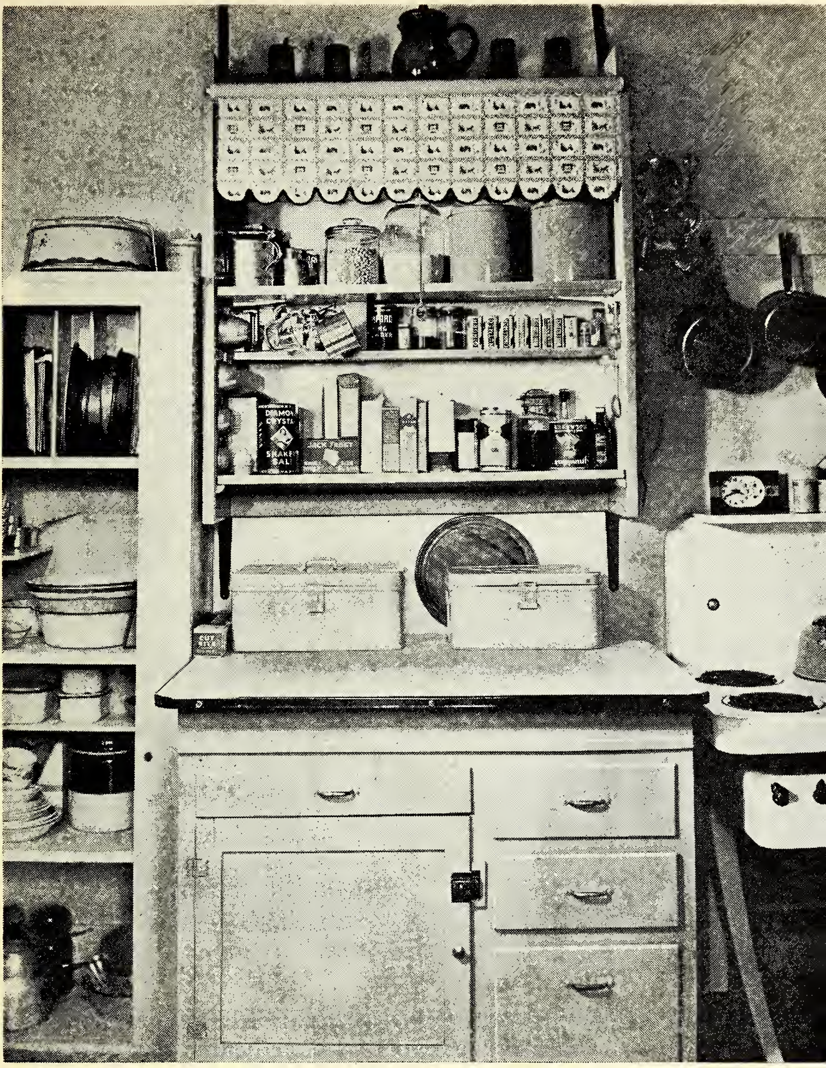

FIG. 3. Mrs. Avery's mixing center opposite the sink. An old bookcase to hol cooking supplies is fastened in place by iron brackets above and below. The base of kitchen cabinet is used for a mixing surface. It is widened at the back by a narro shelf on which stand breadboxes for sugar and flour, and has been raised 4 inche just below the counter top to suit Mrs. Avery's height. Another bookcase at the lef holds cooking utensils; a useful half-shelf is just visible. The utensils and supplie used at the stove are kept conveniently near it. The making of the vertical file fo the shallow pans and the insertion of the small half-shelves were done following suggestions made by students. Windowshades, such as this made of oilcloth, are gay clean, inexpensive, and protective, and avoid the awkwardness of projecting doors.

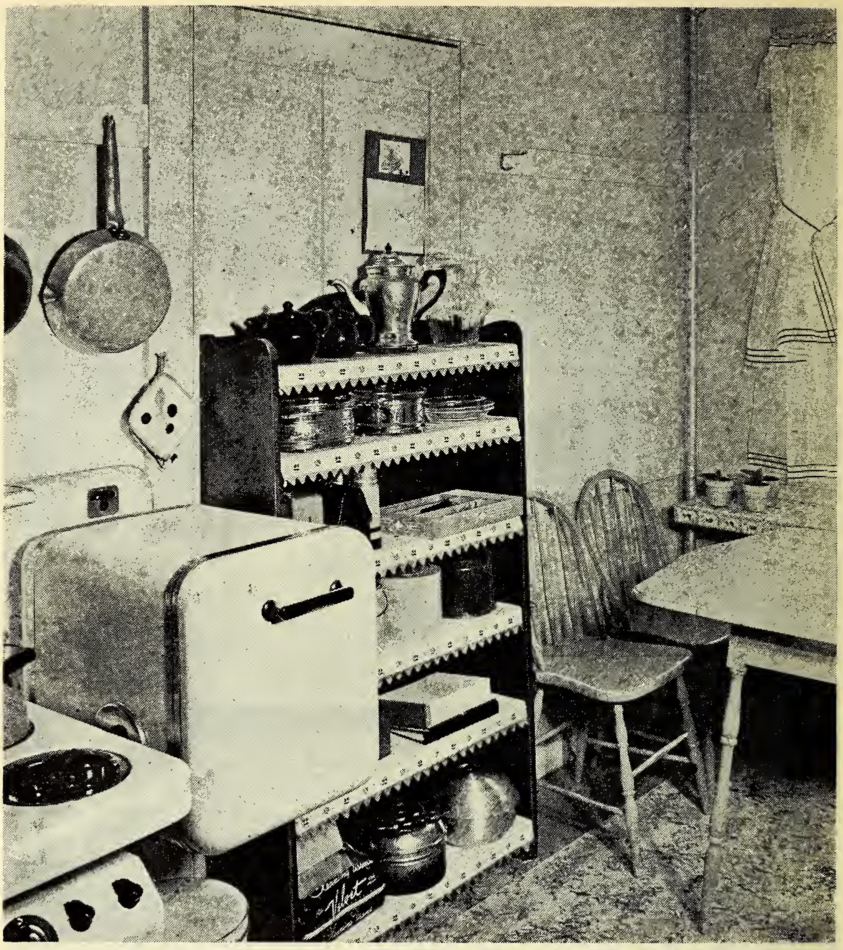

FIG. 4. Originally this table was used just for breakfast.

at times when Mrs. Avery was in the kitchen ironing or doing some other work, Mary would prepare lunch under her mother's supervision. Tom, nine, cooked oatmeal, as he was the first one up in the morning, and occasionally put potatoes in to bake when his mother was away. Both children helped with the dishes and enjoyed working in the kitchen.

At the end of the room in front of the window gay with window plants, Mrs. Avery had placed a table and chairs (Fig. 4), for although they used their dining room most of the time, they found it more pleasant and convenient to eat breakfast in the kitchen. Between this

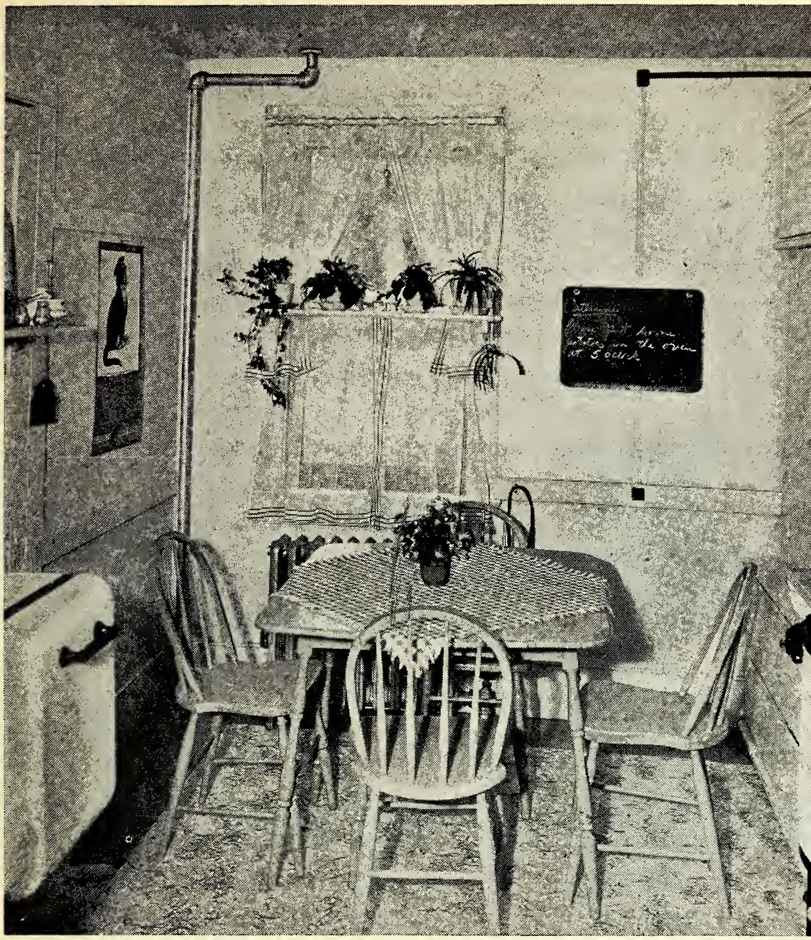

FIG. 5. The breakfast table became a wartime dining table.

table and the stove was an open bookcase for the children's lunc
boxes and the utensils used commonly at both stove and table. Lat
a narrow cupboard was substituted for the bookcase. Then cam
the war, and Mrs. Avery was asked to head a Victory garden projec
She and her husband both felt this was important, but her hous
work must be simplified. For one thing, they would have just as muc
fun eating all of their meals in the kitchen as in the dining roo
To enlarge the kitchen dining center into a comfortable size for a
their meals they placed the cupboard by the door above the di
cupboard, and used it for extra storage space (Fig. 5). When t

coal shortage threatened, they moved to the left the cabinet by the stove (Fig. 3) and installed one of those sheet iron stoves that will heat a room "in a flash." In this case it heats three rooms — the living room, the dining room, and the kitchen — providing a snug living unit in an emergency. "We could not have done that, if we had had a slick, modern kitchen."

The students were impressed with the convenience and attractiveness of this kitchen, with its light walls and woodwork, its bright dishes and plants, the cheerful breakfast table in front of the sunny window. They were even more impressed when Mrs. Avery told them that the entire project, including floor covering, had cost only $25. Their major suggestion was: "Why spend $500 to remodel, when your present kitchen is so pleasant and meets your family's needs so well? Why not use that $500 for something that will give you all greater pleasure?"

This conference was of value to the Averys, to the students, and to the instructor. To the instructor it was of inestimable value because it was concrete, practical material that put life into the teaching of home management. To the students it opened a closed door to knowledge and to understanding. To realize why a thing is as it is, when the student would prefer it another way, is a broadening experience. They saw the design, the intention, back of Mrs. Avery's plan, and saw that she was successful in carrying it out. It made them aware of good management in their own homes that they had never realized or appreciated, as well as of obstacles that might be overcome. The Averys, too, profited. There was the new and better location of the pots and pans, but that was incidental. The fact that others considered her kitchen attractive and individual lifted it in Mrs. Avery's own estimation. If the main reason for remodeling the kitchen was for appearance, could not the $500, if ever available, be used for something that would give greater satisfaction to them all? Surely a fireplace, for one thing, would come first. The "modernizing" of the kitchen was indefinitely postponed.

The Averys were a valuable living lesson to the students in home management. As a family, they were conscious to a high degree both of what they wanted in life and of the human and material resources at their disposal for those ends. Mrs. Avery herself had enjoyed her contact with the young student girls, many of whom were planning to start their own homes soon on limited incomes, and all of whom, in their own homes, were confronted with many of the obstacles the Averys had overcome. Over the following four years Mrs. Avery generously gave the girls the benefit of her family's experience: what problems they had faced, what they considered of primary importance, how they managed to achieve it, what obstacles presented themselves, what things had to be given up, and what goals were changed as resources, knowledge, and experience changed.

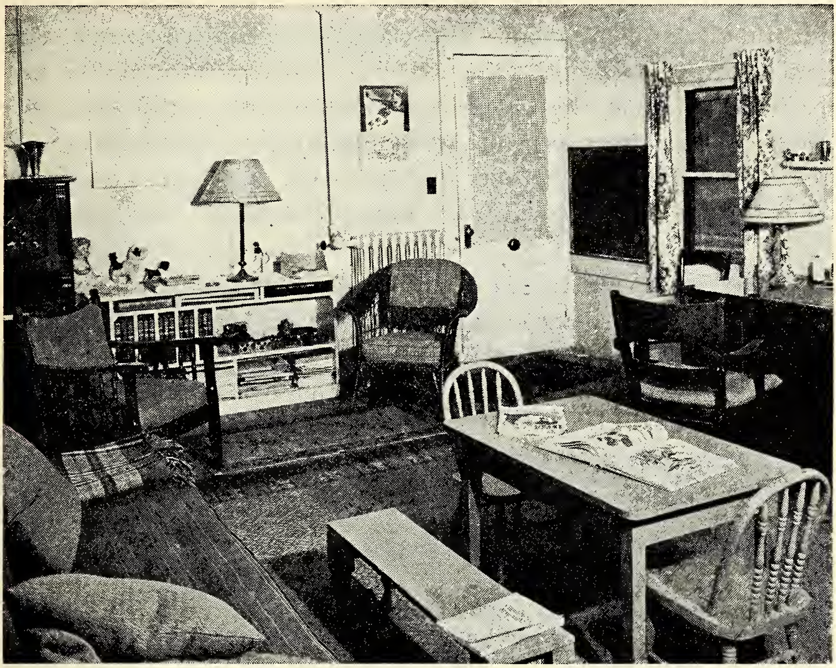

FIG. 6. The "room of the house" is shown in Figs. 6, 7, and 8.

Twenty-four students attended the second management conference in Mrs. Avery's home. The bus unloaded them just as a group of women were leaving from a local Home Bureau luncheon meeting. Mrs. Avery took the students through the dining room into a room at the back of the house, which she called "the room of the house" (Figs. 6, 7, 8). It was aptly named. Large, sunny, comfortable, it was obviously the center of family life, and beautiful because of its air of constant use. Beyond it was a workshop, and Tom was there tinkering with a radio.

These rooms had once been, Mrs. Avery said, the farm kitchen and the woodshed, but they exactly met the family need for a place in which each member could carry on any activity he desired without upsetting the house. The outdoor entrance made it possible for the children to come and go, and to bring their friends in to play without tracking dirt into the rest of the house or disturbing guests who might be in the front living room. The whole family enjoyed doing things, both together and separately, and did not want to waste time preparing to do things. So, in this large room was one desk for Mr. Avery (Fig. 7) and another for Mrs. Avery (Fig. 8) where she could put her sewing machine and keep her sewing as well as materials connected with her club work. Shelves for Tom's small trucks, airplanes, and trains, and for Mary's dolls were open so that playthings could be taken out and put away with the least possible trouble. This room had place for the piano, the victrola, and a radio; for Mary's doll carriage and for a blackboard and a child's desk; for a child's-height table and chairs and a much-used bench that could be table or seat;

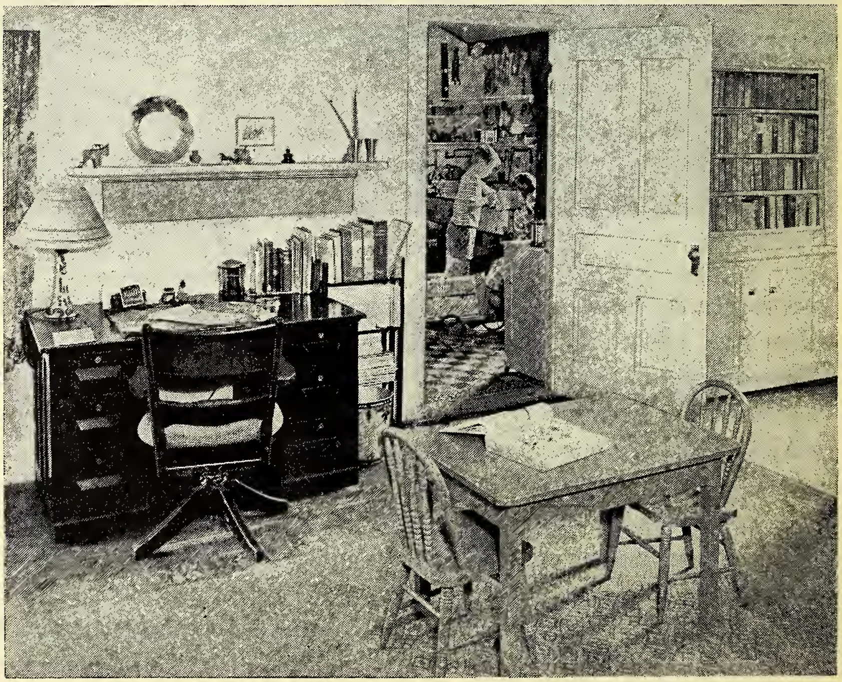

FIG. 7. Mr. Avery's desk and the well-equipped workshop beyond.

for a couch to lie down on, and a comfortable easy chair for each member of the family. In the windows were plants, cuttings, and boxes of sprouting seeds; the children were free to paste their drawings on the wall; the rug on the floor was simple and was washable. Mrs. Avery explained that there was no interference between study, work, and play in this room. Mr. Avery did his work after the children had gone to bed, and she did hers while they were at school.

In the workshop beyond was a workbench with all the appropriate tools, and paints, pieces of board, and the like. Not only did the children of the family and of the neighborhood work here but the older Averys as well. At the moment it contained the makings of dish gardens, as Mrs. Avery was teaching her local Home Bureau unit how to make them.

Mrs. Avery explained that as a homemaker she had four major interests: her husband, her children, her home, and her outside activities. These were not really opposing interests, and she had learned to dovetail them together to give every one, including herself,

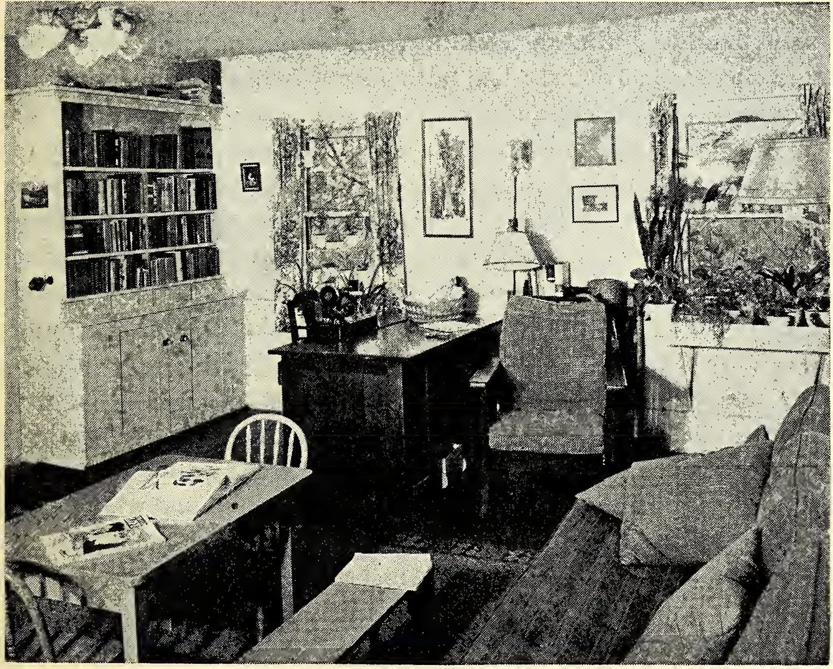

FIG. 8. Mrs. Avery's desk and sewing center near her plants.

satisfaction. The tie with her husband was strengthened by their mutual liking and understanding of the various phases of plant science. Her children were, she said, busy and happy, largely because their home, with its large playroom and shop where they could really do things, had been a rendezvous for friends. They were learning things that children might not learn if they must be careful not to "scratch mother's furniture" or "make such a noise." They were, as the instructor knew, popular with their playmates; Tom was president of the third grade room. Mrs. Avery's house was her third interest, but not the housework — a distinction she made clear. The care of a large house, she pointed out, even with hired help, could take a great deal of time if one allowed it to. To her, meticulous housekeeping was unimportant in comparison with doing things with and for her family. She wanted neatness, cleanliness, and attractiveness with a minimum of care.

This she had tried to accomplish by a wise choice of furnishings and thoughtful planning of her daily and weekly tasks. For example, when she bought a living room rug she chose one with a small design rather than a more fashionable plain one that would show dirt and consequently tend to restrict the children's activities and possibly her own. When she was married she had been given Wedgwood china, beautiful damask table linen, and fine silver and glass. She wanted — as who doesn't? — to entertain in style and elegance. But this style of entertaining meant elaborate meals, a polished house, flowers to set off her table; it meant laborious cleaning up after the party, washing and ironing the linen and putting away her silver and dishes. She was too tired by her effort before the event to make a good hostess, and all the household routine was upset for several days. But impromptu guests were a different matter. She liked to go on field trips with her husband and his classes, and when they returned, at around five o'clock, to invite some of the students to stay for supper. So she laid away her fine linen, and put her Wedgwood china on the less accessible shelves. She bought some percale and some red and white plaid crash suiting that required no ironing, and made some simple, attractive luncheon sets. She bought for $10 a complete set of china seconds made by a near-by pottery, in plain ivory to fit into any color scheme she wanted to use. If one of these dishes was broken by a student, it was replaced at little cost. She stocked certain foods, so that in case of unexpected last-minute guests there would be the makings of a quick, appetizing, and attractive meal. Now the Averys, who enjoy people and like to entertain, can do so naturally and opportunely without upsetting the family routine or putting a burden on any one.

Asked about her furniture, Mrs. Avery said that when they had moved from the four-room apartment to the first eight-room house they considered either borrowing money to buy the good furniture they wanted or using the installment plan. Both she and Mr. Avery, however, valued the security given by a "cushion" of savings for emergencies, and it meant more to them than new furniture. At very low cost they were able to buy some good used furniture from friends. This proved fortunate, because shortly afterward there was expensive sickness in the family. Since that time, they have acquired a few good old pieces suitable to their house. They were still using the second-hand, twelve-dollar dining room suite, and Mrs. Avery confessed that it was so shabby she was ashamed of it. But as it did not bother her husband or the children it seemed selfish to spend money for a new dining room table when she was the only one who wanted it. She had bought instead a child's encyclopedia and kept the rest of the money in their "cushion." Had the students noticed the table legs as they came through the dining room? Not one had. They had seen only her gay and attractive appointments and the flowers from her garden.

Lastly, Mrs. Avery said, she had her own interests outside the home. There was her social life, her bridge club, her Home Bureau work. As local leader in gardening in her Home Bureau organization, she often invited the group to her home. She particularly liked gardening; she liked to raise her own plants and to experiment with window gardens under glass and with plants of unusual foliage.

Mrs. Avery explained a little about their experience with budgeting. During their first married year they had kept careful accounts, and while this was something of a burden it revealed what they could or could not afford. The second year they collected sample budgets from different sources and made a simple plan that fitted their way of living. But this, too, they abandoned after a few months as not worthwhile, and now kept no record other than a sheet of paper on which were listed the months of the year when certain regular obligations came due. At first each had had a checking account, and Mrs.

Avery had a certain amount each month for the house and for her own use; but when the banks began to charge for writing checks, they opened a joint account which they had used ever since. Neither pays attention to what the other spends because their living is so uniform that they know what they can afford. Mrs. Avery laid great stress on the value of their "cushion" for emergencies. When she had been ill or tired they had been able to hire help, to send out the laundry for a few weeks, or to go out for meals on especially hot days in the summer. When the opportunity had come to buy this house they had felt no uneasiness in borrowing money for the venture, because they knew so well what their probable income and expenses would be and knew that they could be happy living within their means.

After Mrs. Avery had finished talking, the girls divided into three groups. One group went upstairs to the bedrooms and bathroom, another to the dining room and the front living room, and the third group she personally took to the kitchen where she explained the whys and wherefores of each detail. These groups followed each other, so that every one had an opportunity to see the entire house. Mrs. Avery told the upstairs groups to ask themselves three questions as they went into the bedrooms: "Would I like to have it for my own room?" "Would I like to be a guest in it?" "Would I find it easy to clean?" This brought to the students' attention the charm of the rooms with their simple furnishings and absence of useless accessories; the good lighting, comfortable beds, and convenient storage space; and the ease with which the rooms could be cleaned. The living room, which Mrs. Avery had thought was stiff and unhomelike, she had rearranged with the assistance of her Home Bureau group and an extension specialist in house furnishing. They had tried out several arrangements, keeping the one that Mrs. Avery had liked best. "In fact, we have all liked it so much that we have not changed a thing." To the outsider the room looks friendly and hospitable, like the rest of the house.

No textbook could have given students the sense of reality of home management that this home conveyed. While they realized that some things important to the Averys would not be important to them or to other families, and while this home might not have satisfied some of their own desires, they could not help but recognize that the Averys were managing very successfully to achieve what meant most to them.

COMMENTS OF STUDENTS AFTER VISITING THE AVERYS *

I think all of us realized, from what Mrs. Avery told us, the sharing and give and take required to have a happy family. I was impressed by what she said about the dining room table. I think this showed clear thinking through of what she first considered a problem.

The food management impressed me especially. The manner in which Mrs. Avery follows up sales, buys in large quantity, and cans any surplus and her wise use of left-overs are some evidences of good management. In my home we always had a stock of food in the pantry but I was never conscious of when it was purchased. Now, when I think back, I can hear my Mother say to my Dad, "We need some cornflakes but get them at Blanks, for they are having a sale there this week." Mother buys where she can buy the cheapest, but I have always taken it all for granted and never realized its value until it was pointed out by Mrs. Avery.

The Avery home left me with a feeling of security. It was a place I would like to return to for more than just a visit.

Mrs. Avery is the type of woman who would not worry if her neighbors disapproved of her way of living, since she manages as she thinks best in her particular situation.

Mrs. Avery has proved to herself and to most of those who know her that money alone does not make for happiness. Willingness and desire to make a choice and to carry it through with courage are also important.

My family is inclined to go to considerable work to entertain and therefore we do it less often than we might. Perhaps a good way to face this problem would be for me to bring into the conversation some of Mrs. Avery's ideas and philosophy. We might shift to a more casual acceptance of guests.

I have never met a more charming person than Mrs. Avery. The Avery home resembles its homemaker. It is calm and ordered without seeming stiff and cold. Mrs. Avery gives the impression of having experienced both happiness and unhappiness, yet the happiness has predominated in her nature. Her home gives a like impression; it has seen both happiness and trouble but it is the happiness that has lingered in the corners of the room.

SUGGESTIONS FOR DISCUSSION AND INVESTIGATION

READING:

John Dewey, *How We Think*, D. C. Heath and Company, Boston, 1933, chap. I.

1. Discuss the contribution of John Dewey in the field of educational philosophy. Outline the steps in "reflective thinking."

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* These comments are given only where papers on the family were written by the students.

2. Show evidence of reflective thinking in the way the Averys managed.
3. What does Mrs. Avery tell us, either directly or indirectly, about the values and goals they consider important in their home? What were some of Mrs. Avery's minor individual values? Would the achievement of some of these interfere with the achievement of her broader family values? What choices were possible? What were the advantages and disadvantages of each possibility? On what basis did she make her final decision?
4. Cite instances to indicate that thorough investigation by the Averys led to a wiser use of resources than might have been possible otherwise. What were the material resources that the Averys used to establish the kind of home they wanted? What were their human resources that made the use of their material resources effective?
5. Give a recent example of good management on your part. What were you trying to accomplish? What obstacle stood in the way that made making a choice necessary? What possibilities for action had you? Which did you decide upon tentatively? What resources, within yourself and without, did you make use of? Did you investigate, experiment, and test? On what basis did you weigh values, and what were the advantages and disadvantages of each possibility? On what basis did you make your final decision? What brought this process out of the realm of reflective thinking and into the realm of management? Were you satisfied with the results? If so, why? If not, why not?
6. Give an example of good management in your own home of which you have become aware while reading the story of the Averys. Point out your reasons for so considering it. Of what possibilities for better management in your home have you become aware? How would you put your idea into effect?
7. What change, if any, has taken place in your point of view about home management as the result of reading this report?
8. How would you go about getting the kind of help that Mrs. Avery received? Would you be willing to have students or neighbors come into your home or room and would you tell them of your way of managing? Give the reasons for your answer.
9. Make arrangements for your class or group to visit some homemaker whose family seems to be getting out of life what they want. Ask her to tell you how they have managed to get what they want. Write up this experience, bringing out what the family wanted from life, what they had, and what they did to satisfy these wants.
10. In some cases it is wise to follow your own judgment, in others it is wise to accept the ideas or judgment of others. Discuss this problem as it arises in the home and outside the home.

CHAPTER 3

THE BARTONS AND THE BEALES MANAGE ON LOW INCOMES

THE BARTONS

Mrs. Barton's kitchen work was so hard and time-consuming that a neighbor suggested she ask for a kitchen management conference. This was conducted by a home management specialist and attended by a group of neighbors and a few students from the college. The home management instructor and the specialist called on Mrs. Barton and plans were made for the home management class to visit Mrs. Barton's home. In the following years classes continued to help Mrs. Barton with her problems. The Bartons did an unusual job of improving the living conditions of their home at almost no cost, and students were able to note the progress of the Bartons from discomfort to comfort. This visit took place in 1940.

As the bus stopped in front of the tiny gray house on the main highway of a small village, the students were greeted by smiling baby faces at the front window. Mrs. Barton welcomed the girls eagerly and apologized for not having seats for so many. However, this group had become good "floor sitters," though the room was so small that the floor was covered with knee-hugging students.

Mrs. Barton was a small, vivacious young woman, a little too thin and with too much nervous energy. Her cheeks were flushed and her dark eyes flashed as she stood by the living room door talking to the students. Her print dress sparkled with freshness, and against each knee a child leaned solemnly. Her story was not organized, but as the picture unfolded the students probably gained a better understanding and appreciation of the Barton family than might have been gained from a studied outline.

Like so many other little roadside houses, this home had no modern conveniences. There was no electricity, running water, or furnace. It was lighted by kerosene lamps, heated by coal stoves, and all water had to be brought into the house from a well in the yard. However, it cost only $16 a month out of their income of $1100 a year; and it was, in fact, the only available house within their means that was near the farm where Mr. Barton worked and also near a church and a good school for the children. They had a car, but the family could not often use it because Mr. Barton needed it to answer calls for day or night emergencies. For the present, the children were too young to realize the social advantages of a larger, more attractive, better equipped home, and it did give them many valuable opportunities. So Mrs. Barton put up with the place.

The Bartons had not done much to improve the house, for they hoped soon to be able to afford a place with modern conveniences. Mrs. Barton realized only too well the advantages of electricity and running water for protecting her health, saving her time, and putting a "zip" into her large amount of daily work. But they had done some things. When they first moved in, the sink drain was clogged and they had had to carry out all their waste water. They corrected this by digging up the drain and laying in tiles. As in so many older houses, the kitchen ceiling and the walls and ceiling of the dining room were dark brown, making the rooms dark. They had brightened the kitchen by painting it a light color.

The children had certainly benefited by the fresh air and country living. There were four boys, aged seven, six, three and a half, and two, and a little girl of five. They were beautiful children and pictures of health. They had pets — a cat, a dog, and a fluffy white rabbit. For the children's sake Mrs. Barton had joined the grange, the Sunday school, the parent teachers association of the village, and the local Home Bureau and planned that the children, as they grew old enough, should join the boy scouts and the 4–H club. Above all, both she and Mr. Barton wanted their children to become good citizens.

The Bartons had had two years of high school, and both of them sought every opportunity to improve their education. Mrs. Barton was an enthusiastic member of her local Home Bureau. She would, she said, let her housecleaning go undone rather than miss a meeting. She was looking forward particularly to the next meeting, as it concerned Christmas gifts for children and would help her solve the Santa Claus problem. From the news letters sent out by the Home Bureau she obtained all sorts of practical ideas: how to make mittens for the children from old coats and other materials, how to plan and prepare inexpensive and nutritious meals, how to vary children's lunches. At a meeting in the home service center of the gas and electric association in a near-by city she had learned how to order and use inexpensive cuts of meat, how to select vegetables, how to use the pressure cooker. A home management specialist had made a pressure cooker available to her, so that now she could can large quantities of fruit and vegetables, some home grown and some given to them from the farm on which Mr. Barton worked. Her shopping required careful planning; but by using "The Penny Savers," a pamphlet prepared by the city stores and mailed to customers, she was able to compare prices and to buy where things were cheapest. Mr. Barton took her to the city once a week, when she did her shopping for the following seven days.

At the invitation of the home management specialist, she and Mr. Barton had gone, one blustery March night, to the college in the next town to see some of the household conveniences in the management laboratory and some children's homemade toys in the family life workshop. They were greatly struck by the many clever ideas that they could adopt without any money outlay. Mr. Barton came home and made from orange crates a small table and two chairs for the children. These had many uses; they made a play center, they served as a supplementary dining table for the little children when there were boarders, and the older children used them for their school work.

Her local Home Bureau unit aided by a state housing specialist had held a room arrangement conference in her living room. They had tried various arrangements of furnishings, criticizing that one or approving this. When Mrs. Barton had made her choice, they set the desk, made from an old organ, between two windows for better lighting, lowered pictures, and placed lamps at comfortable reading centers. Mrs. Barton was planning to make some slip covers for the chairs, using the Home Bureau directions. To the students the room looked homey and comfortable with growing plants in the windows, magazines on the table, and scattered evidence of the children's occupations. Of still greater help had been a conference held in her kitchen by the state management specialist, the county Home Demonstration Agent, the management leader from that unit, two neighbors, and two college students. Their suggestions, later carried out, relieved immensely the strain of housework.

The students went into the kitchen, and Mrs. Barton told how she had been asked to go through the motions of preparing a meal, and had realized for the first time that to perform this task she walked in and out of three different rooms, the kitchen, the dining room, and the pantry. As the group had asked questions, looked at photographs of other kitchens, and discussed possibilities, it appeared that practically everything needed for use in the kitchen could be kept there. This had involved moving the kitchen cabinet from the dining room to the kitchen, many of the commonly used supplies and utensils from the pantry to the kitchen, the washing machine from the kitchen to the dining room, and the family's outdoor wraps from the kitchen to the pantry, which was to be used now as a storeroom. The kitchen cabinet had been placed beside the stove. "Now," she said, "I can put up the three school lunches at the cabinet without walking at all."

The new plan had the double advantage of concentrating the kitchen work and of relieving the kitchen of other confusing activities. If Mr. Barton made a cover for the washing machine (Figs. 132, 133) and placed a mirror over it, he would have a satisfactory shaving center, away from all kitchen activities. A chintz cover and a vase of flowers or a bowl of fruit would transform it once again. And moving the wraps out of the kitchen relieved confusion at breakfast and lunch time.

She pointed with pride to conveniences Mr. Barton had made: to a knife rack from some driftwood washed up from the stream in the back of their yard, to shelves behind the stove for supplies used there, to pans hung conveniently from hooks near the stove, to a table ingeniously fashioned from an old bookcase and placed at the end of the sink, to a service wagon (Fig. 9) made from an old bed and equipped with wheels from a baby carriage.

At one side of the room was a large enclosed cupboard. Mrs. Barton said that formerly she had kept in the bottom of this articles in common use, but by moving these to the top section she not only avoided stooping but freed the space for the children's rubbers. There was a low chair near by in which they sat to take them off or put them on. A neighbor had given her some reflectors for her lamps.

These were so placed as to throw light on the working surface and not in Mrs. Barton's eyes.

The group considered ways of making the dining room more cheerful. It was a room the Bartons used a great deal, for eating, for school work, and for ironing. The group considered the feasibility of hanging muslin or light material to cover the walls. When a class next visited Mrs. Barton, two gay but inexpensive pieces of light-colored chintz were hung on the walls, and some of the children's drawings had been tacked up. A partly finished cover over the washing machine pointed to its eventual camouflage.

As the students assembled again in the living room, Mrs. Barton told a little of their way of managing. Lack of running water was the greatest hardship. While the pump was just outside the back door, which was reasonably convenient, there was no room in the kitchen for storing more than a little water and she had to lift and carry most of it, though she suffered from backaches. Washing was therefore her most difficult household task, and to ease it she spread it over two days. As to the children's baths, these were weekly ceremonies performed in the kitchen, with the tub in the middle of the floor, window shades drawn, and doors locked. For her other tasks she could make no rigid schedule because she was working at odd times in other homes in the community to pay for some desperately needed dental work. On the days when she worked out, a neighbor looked after her children. She reciprocated by doing a like favor for her neighbor. Since Mr. Barton was laid off one month each year, due to the seasonal nature of his work, she usually took a boarder for a while to make up for his loss of pay.

She baked nearly every day and made cookies for the children's school lunches. Canning was an important summer activity. The Bartons rented a piece of land on which they raised vegetables both to give them good food and to reduce their food bills. Mrs. Barton told the following story: Some beans had been given to them one Saturday and had to be canned before they spoiled. This meant canning on Sunday. Mr. Barton was preparing the beans, Mrs. Barton was doing the actual canning, and the children were helping in every way they could. In the midst of this activity the minister knocked on the door. All signs of the canning and of the beans were whisked away in a moment, and the minister received with due ceremony. All would have gone well, she said, had not one of the children let the cat out of the bag, "as children will." "And," she added, "I am supposed to be a good church member."

Mrs. Barton explained that each child had his chores. Even Johnny, aged two, picked up things from the floor. This practice taught the children responsibility, gave them a feeling of being needed, and it also helped Mrs. Barton. At the time of this meeting, the children were being paid a penny for performing certain chores, so that they might have their "own" money to buy Christmas presents for their friends and schoolmates. It might be, Mrs. Barton said, that "paying" the children was open to criticism; but she did know that it had taught them how to earn and to spend money.

Mr. Barton worked long hours and did not always have a day off at the end of the week. When he did, it was a play day for the family. They always did something together, and their ingenuity was often taxed to think of something that would be fun and not too costly. Quite often it was a family picnic. At the moment they were looking forward to packing a lunch and driving in the family car to visit Mrs. Barton's mother in a near-by city. As the car was a necessity and in general used only for business, this was to be an unusual treat.

One thing became clear, as Mrs. Barton talked. Her house did not make her feel socially inferior to others in the community. Apparently she held her head high and worked shoulder to shoulder with them, an important member of the community and a good neighbor. It was evident that she was happy and very much in love with her husband. In spite of limited funds she visited the hairdresser regularly, and her inexpensive, homemade dresses fitted well and were gay, becoming, and smart.

Mrs. Barton finished by saying, "We enjoy life. I do not believe we would be happier if we had more money."

Many classes visited Mrs. Barton after this. She said she liked to have them come; they gave her a lift, a fresh outlook on life. Then, for a while, life dealt less kindly with the Bartons. At about this time Mrs. Barton told the instructor that she had some special problems with which the students might be able to help her, and would she bring them out? They found Mrs. Barton thinner and more tense, her usual sparkle of gaiety dimmed. She was close to angry tears as she told how a speeding motorist had run over their dog that morning. Mr. Barton, she explained, had gone to work too soon after an attack of the grippe, and an ear infection had set in. Worry and pain had driven him nearly crazy. There was great danger that he might lose his hearing and, if so, probably his job. All that long hot summer she had nursed him and had taken boarders to help meet the doctor's bills. It was obvious that her teeth were giving her pain, for her face was swollen; but with Mr. Barton ill she could not afford the necessary dental work, and her pride prevented her from going to a clinic. The children, on the other hand, were as happy and as well as ever. Mrs. Barton said proudly that they were getting their quart of milk a day, their orange juice, and their cod liver oil.

Her daily work had become a wearisome burden. She was too tired to think up anything new for the children's school lunches; the cramped kitchen was an increased irritation now that she had to cook for so many. A student who had been doing some work on school lunches in connection with a foods and nutrition course undertook to help Mrs. Barton with this problem. Others undertook the challenging problem of making the kitchen, with its meager resources, more workable. The students expressed admiration and wonder at the skill, intelligence, and courage with which the Bartons were managing under almost insurmountable difficulties. More than one said, "I could not begin to manage as well as they do."

At Christmas time the instructor found Mrs. Barton almost at the breaking point with discouragement and ill health. She was in need of an operation. Her teeth were poisoning her system. Mr. Barton had been laid off for a month. Fear of "going on relief" was becoming a nightmare. With bitter tenacity they still clung to the one luxury they had been able so far to earn, the luxury of independence. She had sacrificed it for her children; they had gone to a public health clinic for treatment of teeth and tonsils. She spoke with gratitude of the friendliness of the students who had brought the children some Christmas gifts, and of their help with the kitchen and the school lunches.

The tide finally turned, as tides do, and the next class that visited Mrs. Barton found her a new person. They were welcomed into a different house, a larger house with electricity and a pump at the kitchen sink. It was nearer the city and closer to Mr. Barton's work, it had a large yard and a garden, and as there was only a slight differ-

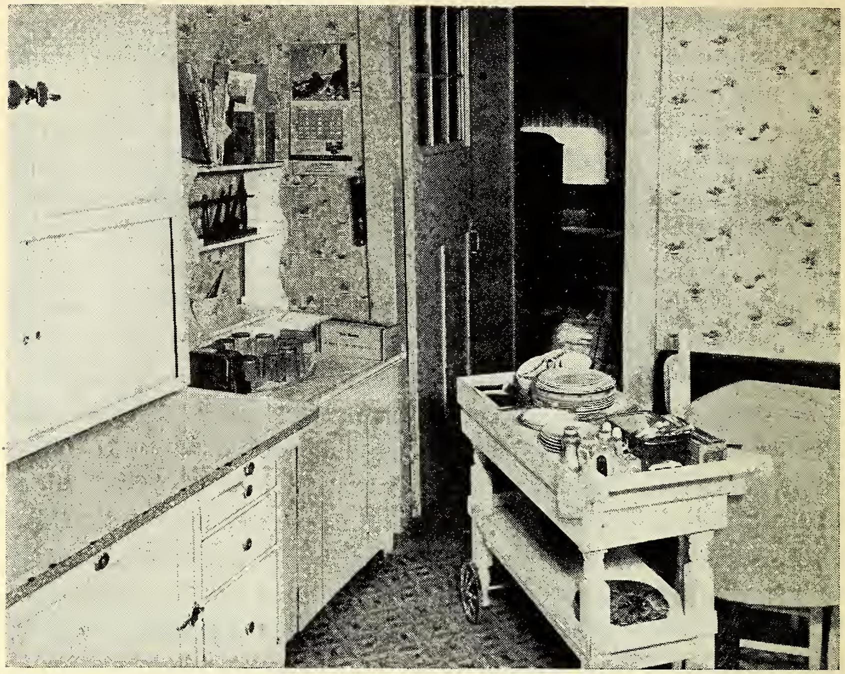


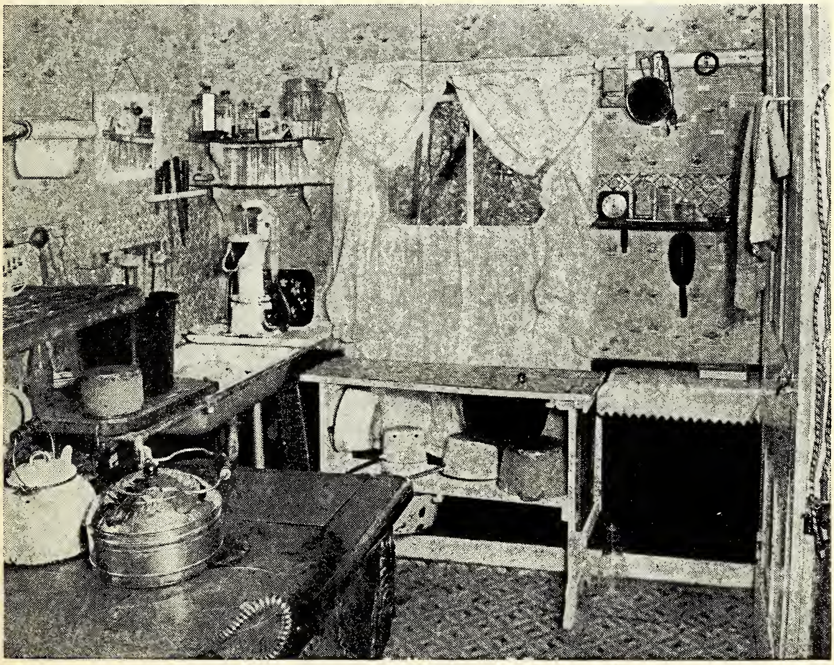
FIG. 9. The end of Mrs. Barton's "new" kitchen facing the dining room. Mr. Barton made the shelves at the right of the cabinet for her cookbooks and his smoking equipment. Glasses used by the boarders in the dining room are kept here, and the toaster is handy to either kitchen or dining room table. The service wagon, convenient for setting and clearing the dining room table, was made by Mr. Barton from parts of a bed and wheels from a baby carriage. The family eats at the table at the right.

ence in the rent they could well afford it. Mr. Barton had practically recovered. Though he still had traces of streptococcus infection, his hearing had been only slightly impaired. Mrs. Barton had gained weight, her smile flashed over new teeth, the operation had not been found urgent. She was working part of the time, and the doctor's bills were becoming less and less frightening. Having electricity in the house and a pump at the sink, she did not complain about the lack of running water (Figs. 9, 10).

In fact, Mrs. Barton was on top of the world. The neighbors had given them a "shower" of electrical equipment, and she showed with enthusiasm a floor lamp Mr. Barton had salvaged from the city dump and repaired. All the conveniences Mr. Barton had made for the other house had found a useful place in this house. They had ordered a folding bathtub, which would be, Mrs. Barton said, a step better than the washtub. The greatest achievement of all was the little room given over to the children for a playroom and a study, though occasionally it had to be snatched back for a roomer.

Students continue to visit the Barton home, and by reading the class reports of other students they are able to appreciate the management in this home over a period of years. The last class trip to the Barton home was made about three years after the first trip. Junior was now ten years old, and would be in the 4–H club next spring. He wanted to buy a full-blooded calf for his project, so next year he

FIG. 10. The other end of Mrs. Barton's kitchen. Mr. Barton made the knife rack over the sink and the work surface in front of the window. Notice the clever device by which the dark kettle and the dishpan are suspended under the shelves to save space, and the rack for the breadboard at the end. Mrs. Barton put up the shelves over the pump. Here, glasses for the family can be filled, put on the tray behind the pump, and carried in one trip to the kitchen table where the family eats. To relieve congestion at the sink she put up the narrow shelf at the right of the work surface for shaving supplies; the towel hangs on the cellar door. Try to imagine this kitchen before these conveniences were added. The cabinet is around the corner at the right of the cellar door, in the ell of the kitchen which is shown on the opposite page.



was going to raise and sell vegetables and buy the calf the following year.

The large family garden paid dividends, but not without hard labor on the part of the Bartons. Mrs. Barton told of planting beans late one night while one of the children carried a flashlight. She told with pride how they had harvested on their three-quarters of an acre of land 1½ bushels of onions, a bushel of beets, 1½ bushels of carrots, and 15 pumpkins. She had put up 265 cans of succotash, beans, corn, beets, carrots, and spinach; as well as 24 cans of peaches, 36 cans of pears from their own trees, 100 cans of strawberries, and 35 half-pints of strawberry jam. They stored the root vegetables in sand. She was cooking for five boarders at this time. She did not, she said, keep accounts other than an accurate record of the money earned by taking in boarders and from her 75 chickens.

Mrs. Barton laughed when she told the group that she was the local leader in folk dancing for her Home Bureau unit. She told, too, of her cooperation with the college in a study of finishes for felt-base floor covering. With amused satisfaction she revealed that this saved her three floor moppings a week, as it was part of the study for the investigator to keep it mopped.

The Bartons go cheerfully on, never losing sight of their goal, making their own fun, enjoying their work, attacking all obstacles with courage and common sense, educating themselves, and making a contribution to home economics students who are eager to know the meaning of good home management.

COMMENTS OF STUDENTS AFTER VISITING THE BARTONS

To me the most valuable venture we have made in our course was the visit to the Barton home. Here was the challenge to all of us, to help such homes in the way a home management class can do.

The very happy expressions on the five small faces were contagious and we could see there the real wealth of that home.

This opportunity impressed on me, a college teacher, the futility of our textbook theories, and the need for getting into the homes.

It isn't the house we live in, but the use we make of the one we find ourselves in, that makes for real living.

Many of the class were, perhaps, surprised at the Barton home. It was different from any home they were used to. As for me, it made me a little homesick. It is a home typical of the kind of home I have been used to and lived in all my life. To some it meant poverty. To me it meant the supreme of hominess.

One does not need to have modern equipment and ordinary conveniences to start with. Good management means using what you have to get what you want, and one can start with little or much.

Perhaps in starting with less, it is easier to state a purpose. Mrs. Barton's purpose seems to be to bring up a healthy, happy family and still have time for outside activities. They have made things as convenient as possible, making these conveniences from what they had on hand.

Mrs. Barton has done her best to make it [her home] cheerful and I think she has succeeded. I feel that any house Mrs. Barton chose to live in would become a home.

I think the biggest thing about Mrs. Barton is her attitude toward life. They cannot go on picnics as they did at one time, since they have had to give up their car and the boarders take so much of their time. And so, Mrs. Barton says, "We will make a fireplace in the back yard and have our picnics there." She says, "We'll make the best of it."

She has discovered that through hard work and good management, it is possible to bring up a large family on a low income, and still have energy and a zest for living. ✓

This home is concrete evidence that we should not judge until we have facts and the background. This is by no means the type of model house found in magazines, but when we understand the situation, we marvel that Mrs. Barton could possibly have done as much as she has.

SUGGESTIONS FOR DISCUSSION AND INVESTIGATION

READING:

Janet Lane, *Your Carriage Madam!*, John Wiley & Sons, Inc., New York, 1934.

Edmund Jacobson, *You Must Relax*, McGraw-Hill Book Company, Inc., New York, 1934, chaps. I–VIII.

Carleton John Lynde, *Everyday Physics*, The Macmillan Company, New York, 1936, chap. I.

Paulena Nickell and Jean Muir Dorsey, *Management in Family Living*, John Wiley & Sons, Inc., New York, 1942, chap. VI.

1. Investigate other books on the subject of fatigue, posture, and body mechanics. Find at least three different sources from which you can secure free publications on posture and efficient use of the muscles. Send for these publications.

2. What do you think were the most physiologically fatiguing factors in Mrs. Barton's housework? Give reasons. What might have been the most mentally fatiguing factors? Give evidence.
3. After reading and discussing some of the above references, demonstrate with actual equipment the most efficient method of using the body in lifting and carrying heavy loads, walking, standing, reaching, bending and stooping, pushing heavy equipment, rubbing, going up and down stairs, shoveling, hoeing. If possible, invite a physical education director to work with you on these demonstrations.
4. Evaluate some of the household equipment on the market in terms of ease in using. Find out which manufacturers of war materials will be making household equipment after the war. How can colleges or women's clubs influence the production of household equipment the use of which will bring the stronger body muscles into play and will take the minimum time? How can these manufacturers be contacted? From what sources can money be available for research along these lines? How can homemakers help such research? Find out what research your state college is doing.
5. What minor personal values seemed most important to Mrs. Barton? Which of these did she give up because their fulfillment would interfere with the achievement of broader family values? To what extent was she able to satisfy some of her personal values?
6. Discuss Mrs. Barton's enterprise, or her "human self-starter." What part did this play in the success of her management?
7. Cite the different ways in which the Bartons educated themselves. How did this education help them to manage on their small income? In what ways did they contribute to the education of their children?
8. How were such human resources as an awareness of motion economy, ingenuity, enterprise, imagination, and so forth, used by the Bartons to make housework easier? What material resources were used along with these human resources, and how were they used?

THE BEALES

Left with two children and no means of support and physically handicapped by having no left hand, Mrs. Beale received help from the county welfare agency until she could get a job. She first secured a job with the W.P.A. and later a temporary, then permanent, position mending in a dry-cleaning establishment. Keeping her two children in school and her home running was difficult under these conditions. It was through the county welfare agency that she learned of the possibility of working with college students on her home management problems.

Mrs. Beale was left entirely destitute when she came to X to re-establish a home for herself and her two children, Ellen aged twelve and Harry ten. She brought with her one table, four broken chairs, and two beds. She bought a stove, had the children's tonsils out, sold nineteen chickens at 50 cents apiece to pay her moving bill, and had $2 left. Efforts to get a job failed, and for six months she "lived on nothing." A friend let her have credit for rent, she bought milk from another friend on credit, and she cooked meals for a neighbor in return for the children's food. But she did not have enough to eat herself. When finally she did get a job at $5 a week, worry, undernourishment, and bad tonsils brought on a serious illness and she lost her job. At last, with the advice and assistance of her minister, she asked for help from the welfare agency, though it was the hardest thing she had ever done. She felt it a disgrace to accept relief; she had heard too much about persons perfectly satisfied to let the county take care of them. Strangely enough, after she had made this sacrifice to her self-esteem she felt differently about it. She realized that it was no disgrace unless you made it a disgrace. She spoke with appreciation and gratitude of the welfare workers who had helped her both physically and spiritually.

Mrs. Beale stayed on relief for a little over a year. The welfare agency made many efforts to help her get work, and while she did get small housework jobs, because of her physical handicap she could not do them well. They lived in a basement room, and to save her shoes she went in her bare feet when at home. The concrete floor was cold, her tonsils were bad, and again she became ill. She then had her tonsils out, and her health improved.

Finally, the W.P.A. provided her with the one job she could do well — sewing. She kept this for a year and a half, supplementing her meager income by working half-days or noon hours in different stores. She bought Harry a second-hand bicycle from a friend, paying for it $2 at a time as she could. Harry could now do errands for her. Later she bought one for Ellen, as she believed in treating the children alike. However, when the W.P.A. began to lay off workers, she was one of the first to go.

Then through a friend she got a chance, mending at a dry-cleaning establishment. The manager was reluctant to hire her. How, with her handicap, could she do the work well? But he would give her a try, and she made up her mind that she would succeed. The work was hard, the material she worked on was dark, and her eyes bothered her; but the women she worked with were kind and helped her master the job. It is impossible to exaggerate Mrs. Beale's joy when her employer rated her qualified and gave her a permanent job. Her first investment was a pair of glasses. Gradually she paid up her debts, found a small house that was just right for them, and moved into it.

Ellen was now sixteen and in high school, and Harry was fourteen and in junior high school. The two were great pals. They both appreciated keenly what their mother had done and was doing to keep the family together and the two of them in school, and they helped her as much as they could. Both worked. Ellen clerked in a store after school and Saturdays and did other odd jobs when she could. Harry delivered milk at three-thirty in the morning. Ellen had to do most of the housework because of her mother's handicap, so she got up at three, waked Harry, got him a bite to eat, and then went back to bed. At six-thirty, when Harry returned from work, she and Harry had a regular breakfast. Mrs. Beale got up at six, drank some hot coffee, and dashed for the bus that took her across town to her work. Ellen stacked the breakfast dishes and studied till school time.

The end of the day had its own necessary preoccupations. Mrs. Beale was usually home at five, but dead tired. Ellen and Harry came home still later, as Ellen worked at the store, and on most afternoons Harry went directly from school to choir practice. When Mrs. Beale returned, the house was cold and took some time to warm up even after the drafts were opened in the kitchen and the living room stoves. It was Ellen who got dinner, and she and Harry did the breakfast and dinner dishes. Ellen did the washing and ironing and some of the cleaning of the house. Harry had a yen for things mechanical. He loved to tinker with all the bicycles in the neighborhood and make little conveniences for the house. In the evening Mrs. Beale did the family mending and sewing, Ellen ironed or studied, and Harry went to bed early in preparation for three A.M.

Yet all in all, this was as happy a family as one could wish to find. By their own efforts they had overcome tremendous difficulties and the path ahead looked brighter. They enjoyed each other's company and had to an unusual degree the faculty of making the most of the good things of life and not dwelling upon their misfortunes.

The problem that now troubled Mrs. Beale the most, and the one for which she asked help, was lack of storage space in the story-and-a-half house they rented. Harry slept in the hall at the head of the stairs, while Mrs. Beale and Ellen each had a bedroom. But like most mothers, Mrs. Beale harbored most of the "truck" in hers. This was a large room, with one window, facing north, in the gable end of the wall. Opposite this window was the door to the hall. At the left of the door, on entering, were a large double bed, two small tables, a bookcase Harry had made, and two chairs. This furniture was crowded together, because the side of the room at the right of the door was used for storage. The room had no closet. It was the sight of piles of old clothes for making over, of garments hanging on a not-too-stable rod, of trunks and pieces of furniture stacked on top of each other that irritated Mrs. Beale when she returned at night, tired out. For here was where she sewed. The sewing machine stood at the right of the window, which looked down on the neighbors' back yards. A single light bulb hung from the center of the room. The corners were dark and gloomy. Mrs. Beale wanted better storage facilities for clothes and a better general appearance of the room. She did not know how this could be done, because she had no money to spend and was too tired at night to do anything about it herself.

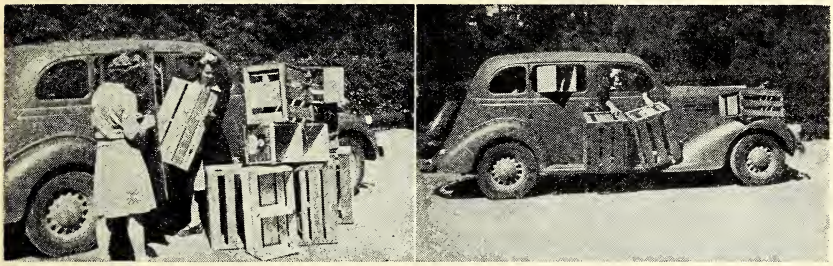


FIG. 11. These students are draying orange crates from the Navy Mess Hall to the home management building to be sterilized before being made into home conveniences.

This was a challenge to the students, and no home management problem was ever entered into with greater enthusiasm. Six students worked upon it. They had only one conference with Mrs. Beale, as her free time did not coincide with their class time. However, she left the key in the door, and the students worked in the house in her absence. Sometimes the house was so cold that their feet ached. With no money to spend, it was natural that they should turn to what

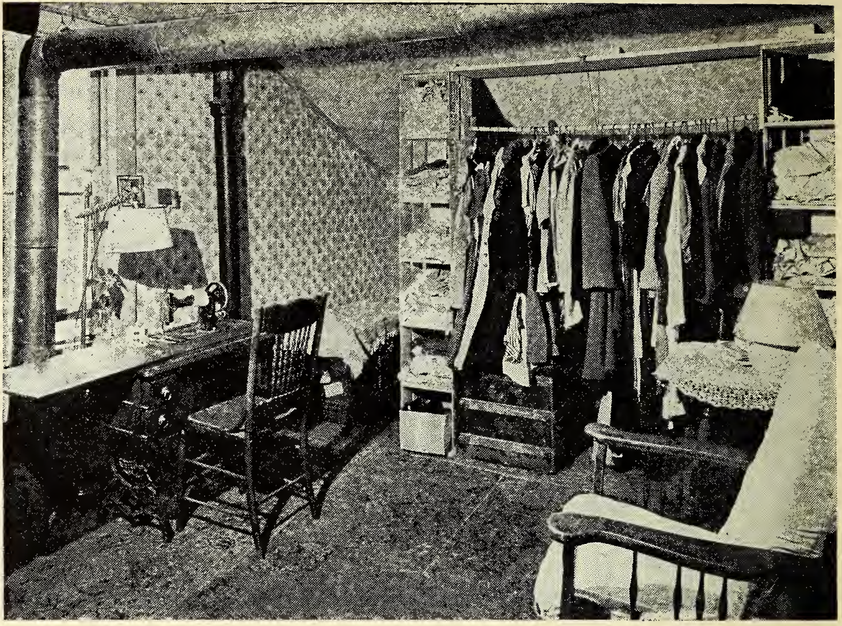


FIG. 12. This closet was made of six orange crates, a board, and three broomsticks. It acts as a screen to conceal trunks and unused furniture and to provide storage space for clothes and sewing materials. Students repaired the floor lamp to give light at the machine. Clothes in the process of being made hang beside those on the rod.

they called the "estimable orange crate." Several of these students waited on table at one of the girls' dormitories, and they were able to collect crates. These had to be sterilized before they were taken into the laboratory, because of their affinity for cockroaches and other vermin.

Sometimes the students worked in the management workshop and sometimes at Mrs. Beale's. To make a closet, they piled up six orange crates endwise into two stacks, spaced these stacks 5 feet apart across the storage end of the room, and fastened them to a "ceiling" made of a wide board, 7 feet long (Fig. 12). They fastened a broomstick between the two stacks. This "closet" stood far enough from the wall to leave storage room behind it, and thus was both a closet and a screen. The six compartments at each end gave storage space for the piles of make-over clothes, and the rod took finished garments. To furnish light at the sewing machine, the students repaired a broken bridge lamp which Mrs. Beale had on hand.

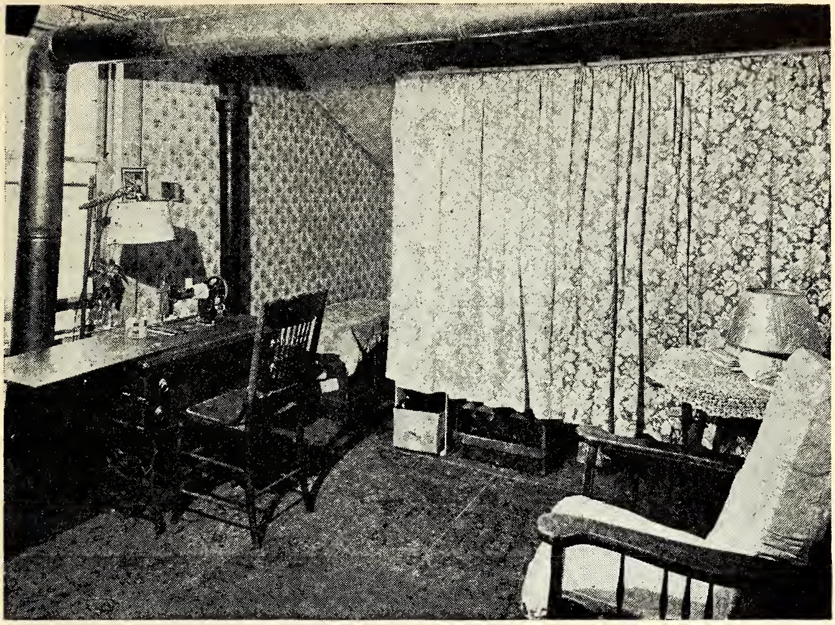


FIG. 13. The light chintz curtains from Mrs. Beale's "pieces" reflect light into the bedroom end of the room. As one student expressed it: "The only expenditure on this project was the board that held the stacks of crates together. The rest was inspiration and perspiration." Two broomsticks were spliced together to make a curtain rod.

Mrs. Beale was delighted. She found four strips of slightly faded but pleasing cretonne for a curtain to extend across the front, and with some difficulty the girls spliced two broomsticks to form a rod for this curtain. The effect was cheerful and restful (Fig. 13). The closet did not extend quite across the room; a passageway the width of a door was left. Back of the closet the girls stacked the extra furniture in such a way that anything could be easily removed if needed. Some things were discarded. A drop-leaf table with one leaf broken in the middle was one of the discards, until Mrs. Beale said that, if it could be fixed, she would like to use it in the kitchen.

The broken table became the nucleus of the kitchen project on which five other students worked. The kitchen contained a small cookstove, a kerosene stove, a table beside the corner sink, and a buffet. The table at which they ate occupied the center of the room. There were no cupboards. All supplies, utensils, and table dishes were on open shelves in a pantry that opened off the corner farthest from the sink and mixing center, and it was necessary to circle around the center table to reach it. One student mended the table leaf, and then another hunt for orange crates took place. The table that had been in the center of the room, replaced now by the drop-leaf table, was put in front of the window beside the table by the sink to form a long, light, mixing surface. Above and below the sink table were crates shelved for the utensils and supplies needed at the sink. Mrs. Beale had gone to the pantry with the girls and pointed out all the things she used in the kitchen and would like to keep there, and the students planned storage space to fit them. Two girls put casters on a grocery box, and fitted it with a vertical file for the skillets and pan covers and placed it beside the stove. Two others made files and half-shelves for the buffet so that the Beales could keep their table dishes there. When all was finished, meal preparation was a simple process and no one had to go to a distant cold pantry for dishes or supplies.

Mrs. Beale took off one afternoon — making up her time at night — to be with the students. Activities were going on in both bedroom and kitchen, and she went excitedly back and forth between the two. She looked tired, and the girls suggested that she sit and rest as they worked. She said: "I can't, this is all such fun and so exciting."

The students never saw Ellen or Harry during the entire project, for Ellen was working and Harry had choir practice after school. But they saw their pictures, went into their rooms, and were told a great deal about them. Harry's room was really the end of the upstairs hall and, of course, needed storage space. Ellen's room opened off this. It had a south window, and the pipe from the living room stove passed through the room, so that it was the lightest and the warmest in the house. Ellen's closet, however, was not convenient. It was dark and deep, and she had a good deal of trouble finding her clothes in it. One of the students, a junior who would be doing practice teaching the next term, felt that contact with a high school student would be excellent experience for her. She and Ellen worked on the closet together.

The students in the class who had no opportunity to work with the Beales asked to go to their home and see the final results of the project. Mrs. Beale, of course, could not be there, but Ellen was excused from class and came with her homemaking teacher. She explained how the rooms had been before, what the girls had done, and how she and Harry had made some changes to suit them better. She emphasized how much easier it was to get meals with the new kitchen arrangement. Mrs. Beale's bedroom looked neat and attractive. Encouraged by the effect of the closet, she had made a dressing table from two orange crates with a board across the top. This she had draped with some cotton material from her "pieces," and over it had hung a large mirror. Ellen's bedroom was now most inviting. An old davenport had been moved in, and in this room her friends would gather and talk.

Later in the term, Ellen was one of three high school girls who talked over the radio. Her part of the dialogue follows:

Announcer: This is one of the Tuesday noontime programs in the series, "Home Economics Works to Improve Family Living." Today, Mary Reed, one of the homemaking teachers at the senior high school, is here in our studio. She has with her three high school girls. They think that they can convince us that high school girls take important responsibilities in their own homes. And now, here's Miss Reed.

Miss Reed: I'm going to ask the three high school girls who are here with me today to tell you the amount of responsibility they have outside of school. Sometimes we older people think that young people's main job is school. While that may be true, it is far from their only job. Ellen, will you tell us a little bit about what you do besides carry a full high school program?

Ellen: Well, Miss Reed, I work over at R's every afternoon from three-thirty to five-thirty, and all day on Saturday.

Miss Reed: Now that's about twenty hours a week, isn't it? Tell us, do you have any responsibility at home in addition to this job?

Ellen: When I get home from the store I get the dinner, because my mother works too.

Miss Reed: You're the one who gets home first, then. Are there others in your family?

Ellen: I have a younger brother who's working.

Miss Reed: That means that there is a lot for you to do when you get home.

Ellen: Yes, we have to do most of our housework in the evening.

Miss Reed: What kind of work does your brother do?

Ellen: Well, Harry peddles milk. I wake him up at three-thirty, and then when he gets in at six-thirty he wakes me up and we get our breakfast.

Miss Reed: What do you think about getting up at this hour?

Ellen: Well, Harry gets a kick out of his job — after all, he hasn't been working very long and every morning it is something new. Like the other morning he wanted to show me how he learned to carry five quarts of milk at once. Boy, I was worried for fear we wouldn't have any for breakfast.

Miss Reed: I would like to ask you lots more questions, but I guess I'll limit myself to one. Do you have very much time to do school work at home?

Ellen: Well, ——

Miss Reed: That is a kind of funny question, isn't it? After all, you've told me that you have a pretty full evening when you get home from work, and it looks to me that you're rather busy in the morning, too.

Ellen: Boy, I like getting paid every week, but I often wish I had that twenty hours to use on other things.

Miss Reed: You are a busy girl, Ellen. Has your homemaking course been of any help to you in that respect?

Ellen: Well, in my foods class we've been studying how to plan good simple meals and get them quickly.

Miss Reed: Has anything been changed at your house?

Ellen: You know, a class of college girls has been coming down to my house and they have changed things around a lot.

Miss Reed: Do they just come in and rearrange your equipment?

Ellen: Why no. Mother and I work with them whenever we can. We've studied the kitchen to find the very most convenient place to keep things.

Miss Reed: When you do that, you find yourself needing new cupboards, new shelves, and all sorts of things.

Ellen: But we didn't buy them. The college girls have helped build and arrange them.

Miss Reed: It seems kind of unusual to me that two people like you and your mother, who work all day, would have time to work with a college class on improving your home.

Ellen: Well, last fall when the college class first started talking to us about working with us, I couldn't exactly see what it was all about. But my high school course seems to fit right in with this work we are doing at home.

Miss Reed: Has this business of trying to make your housework easier all been done in regard to your kitchen?

Ellen: Well, now we are getting ambitious and branching out. We're working on the bathroom and the upstairs bedrooms. My bedroom's looking better fast, and I'm not spending any money on it either.

In the summer following the completion of the closet project, the home management instructor called on Mrs. Beale. The family fortunes were indeed looking up. In the kitchen stood a good-sized coal range that could be banked; moreover, it heated the bathroom that opened off the kitchen, whereas before in winter the bathroom had been too cold to use in comfort. It was a second-hand stove and it had a crack in the back of the oven, but she thought it could be patched. A new enamel-top table at the left of the sink took the place of the two tables. Mrs. Beale had learned that the small table that had stood there was maple, and she looks forward to refinishing it for the living room. It is now in the back room. There were a new tray and drain basket and two new kettles. The drop-leaf table the students had mended was still wobbly, and she had moved it to the pantry.

The most cheerful change of all was a new, gaily painted breakfast set, an extension table and four chairs. She had purchased it from a mail-order house, where Ellen and Harry established credit so that they could buy their winter wardrobes there and pay for them by the month. For their summer meals they had put the breakfast set near the pantry, in order to be as far as possible from the kitchen stove. They moved the table dishes to the pantry to be near the table. In the winter they would move the things back to the warm kitchen.

These things are only the beginning of Mrs. Beale's plans for the future. She hopes to buy a wall cabinet to replace the orange crates by the sink, and use the crates in the pantry. She said with pride that in two weeks she would have a vacation with pay, and during that time she plans to make some more improvements in the kitchen. The landlord put a new screen on the back door, and was going to make some other improvements. "He is the best landlord I ever had," she said.

During vacation, Ellen clerks full-time in the store where she works part-time when school is in session. She buys her own things, pays the light bill, and gets some things for the house. She is domestically inclined, and Mrs. Beale thinks she would make a good home economics teacher. Harry still has his milk route. He has bought a new alarm clock, a repeater, and now Ellen does not have to waken him. Nor does she have to get up at three o'clock in the morning any more, for Harry gets his breakfast in a "diner." He buys his own clothes, buys things for his mother, and has even bought an old car for $20 and fixed it up so that it will go. Mrs. Beale thinks that tinkering with a car is the best kind of education for a boy with a mechanical bent. She rather hopes he will become an airplane mechanic.

Mrs. Beale believes that money is not good for people unless they get what they need with it. Between them, they have bought a War

Bond and are looking forward to putting some money in the bank next year for emergencies. They eat better than before, and the improvement in Mrs. Beale's health was evident as she stood straight and said with fire and determination and an inner satisfaction in her bearing: "I came here a stranger. I had never learned to work because of my physical handicap. I had nothing, and I have gone through a lot. I can laugh at it now. I am forty years old, and I am independent for the first time in my life. It is the best thing in the world. I hope the welfare agency understands how much I appreciate what they have done."

Recently Mrs. Beale received an increase in wages and has bought more bonds. "Some day," she said, "I'll be left alone and I'll need that money."

SUGGESTIONS FOR DISCUSSION AND INVESTIGATION

1. What opportunities have you as a student, a teacher of home management, or a homemaker to (1) get into homes like the Barton's or the Beale's; (2) offer understanding, appreciation, and encouragement; (3) open doors to needed information that will help these families to keep off relief and to maintain self-respect? How can the utilization of such opportunities contribute (1) to your own education for assuming responsibility for social problems, (2) to your understanding of home management, and (3) to your ability to manage successfully?
2. Who furnishes the money for public schools and state colleges? Discuss the right of every citizen in this country to the kind of education that will help him to use his resources to establish and maintain the kind of home he wants. Where can such people as the Bartons and the Beales obtain the educational opportunities they need?
3. What resources do you consider basic for successful home management? Discuss the relation between poor health and inadequate material resources. Use the Bartons, the Beales, or families you know to illustrate your points. Do you think they suffered more than was necessary, or less than seemed likely?
4. Discuss the relationship between a family's income and the amount it spends for food.
5. Investigate such organizations in your community as community centers, welfare agencies, public health clinics, and the like. Through these agencies try to get in touch with a family who would like to work with you to overcome some of the obstacles that confront them in their homes. Make a class or group project of this.

6. Many soldiers returning from the war will be physically handicapped. Investigate what is being done to teach these men vocations that will enable them to earn their living and to support a family.
7. Discuss Mrs. Beale's values in relation to Harry's car project. What values not mentioned do you see in this project?
8. What are credit bureaus? Of what importance are they to the consumer? to the merchant? Explain what their credit cost the Beales. What are some of the factors to be considered in buying on credit?
9. Explain how the Bartons, the Beales, and others pay real estate taxes, insurance, and repairs on the houses they rent.

CHAPTER 4

COLLEGE STUDENTS MANAGE FOR MORE EFFECTIVE STUDY

Eve and Mary, Norah and Jane, all college students, asked their home management class to meet in their rooms and help them plan more efficient study centers. The rooms were too small to accommodate more than two extra students and the instructor. Inspired by the success of their conference, Eve and Mary asked for a conference in their kitchen, which a specialist and several students attended. This story is told on page 125. Later the whole class visited the study rooms and the kitchen.

EVE AND MARY

When students in the management class at the college discuss their own problems, nearly a hundred times out of a hundred the cry is for "more time." As one student expressed it: "I have time for my work, time for my social life, and time for my outside activities, but I do not have time for study." Many admit frankly that their study is pretty much a hit-and-miss affair done against a background of radio and interrupted by conversation with a roommate or some visitor who just dropped in. Since the physical setup under which a person works affects efficiency, these students decided to examine their study centers; with the result that most of them discovered that these did not really exist. Take Eve and Mary:

Eve was a "town girl" and a senior in college. Her father and mother both had jobs that took them out of the city during the week and often for longer periods of time; so Mary, her friend and classmate, came to live with Eve to help with the meals and the housework. They had to share the same room. Alice, Eve's younger sister, who was in high school, occupied the sun porch.

Eve's room was small, and twin beds took up about half the space; between the beds was just enough room for a small stand on which were crowded a radio, a small and inadequate lamp, cigarettes,

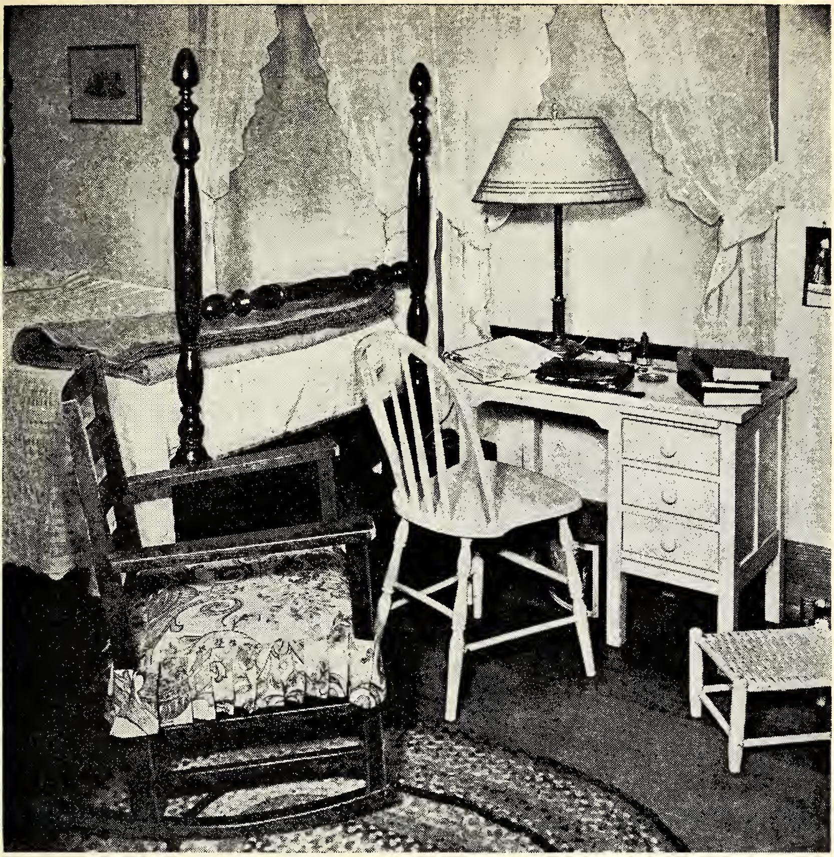


FIG. 14. Eve and Mary's study space as it was originally. The desk is inadequate for two persons, the chair is too high, the lamp occupies too much space on the desk, and there is no convenient place for study equipment. One girl had to study in the rocking chair, or on a poorly lighted bed, or at a cardtable in the main living room.

ashtrays, books, and magazines. Opposite the door to the hall were double windows. The foot of one of the beds projected in front of one window and a small desk stood in front of the other (Fig. 14). In addition, the room contained two bureaus, a tall narrow bookcase, a rocking chair, a straight chair, and a footstool, and one corner was taken up with a radiator. The clothes closet was at right angles to the hall door, and was hung with a curtain to save space. There was just no space for a second desk.

The girls did their reading in bed, because in that way it was possible (they said) to relax while studying. Eve said that one night she came home and found her roommate sound asleep, two pillows under her head and notebooks and papers scattered on the floor: "Obviously the result of too profound study with too much luxury."

The girls wanted to study together, as they took some of the same courses and liked to discuss them. They wanted to keep in some sort of study center all their materials, books, manila folders, correspondence, pencils, pocketbooks, notebooks, and the like. But only one person could work at the desk. If the other wanted to write at the same time, she carried her work to the desk in Alice's room, provided Alice was not using it, or set up a cardtable in the living room. The desk itself was always crowded and in disorder because of lack of storage space for study materials, and the lamp monopolized too much space for the size of the desk. For each book they wanted to use, they had to get up and cross the room to the bookcase.

A larger desk was the solution, but the two girls felt it would crowd the room too much. They had considered moving out one bureau to gain space, but they needed all available drawer space. The rocking chair could go, as it was irritating to stumble over; but it was very nice for weary moments. Even the straight chair annoyed them. If they left it at the desk, they fell over it; if they put it in the corner, they had to move it to the desk. Furthermore, the room was so full of furniture that it was hard to clean, the closet curtains bulged annoyingly with the number of clothes behind them, and the closet floor was covered with shoes.

The four girls concentrated on achieving what Eve and Mary wanted most: a real study center. This meant, primarily, a good-sized flat surface on which they could spread out their work. This surface must be at the height most comfortable for both, and it was fortunate that Eve and Mary found the same height comfortable. There must be adequate light on their work and not in their eyes, and convenient storage space at hand for books, typewriter, and other study materials.

The large flat surface was the first problem. Suppose a new desk top were made of a piece of plywood, supported at one end by the desk and at the other by two orange crates; then knee room could be left between the crates and the desk, and Eve and Mary could sit on either side of the desk and at right angles to the window instead of facing it. As soon as the idea took form, action began. They cleared

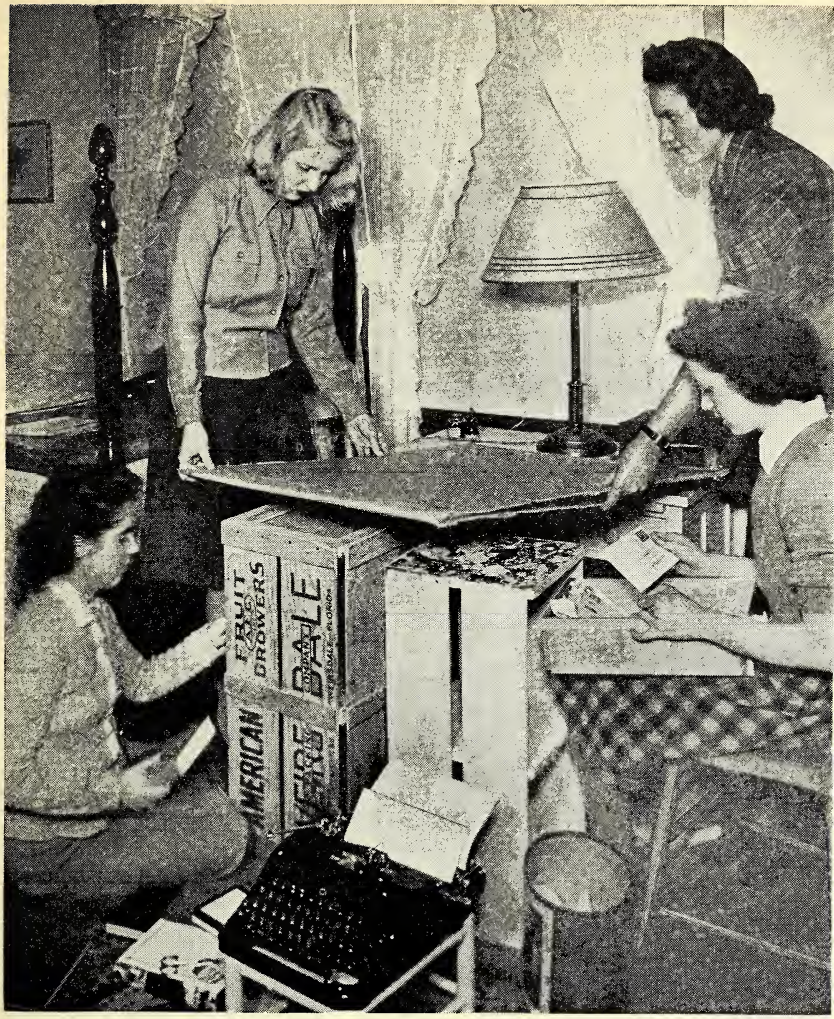
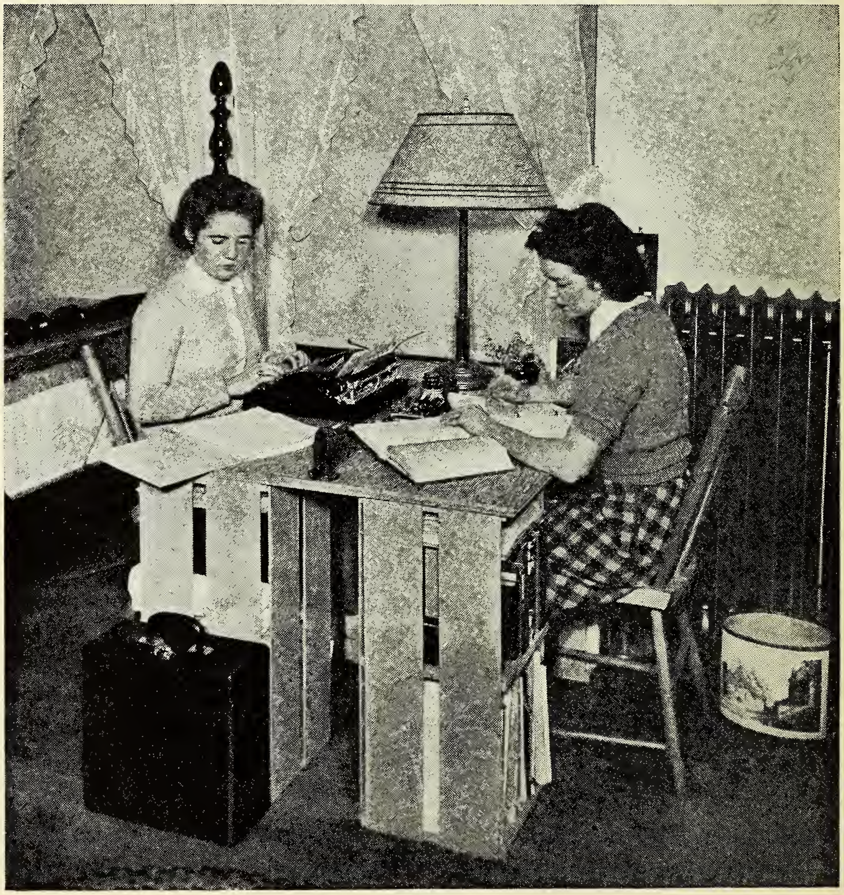


FIG. 15. For Eve and Mary, the four students constructed a larger desk by connecting orange crates with the desk top to form a surface large enough for two persons. They tested this for correct height, and collected and sorted all materials to be used at the desk. Files to hold these study materials were made adjustable by screw eyes.

the desk top, brought two orange crates from the attic, and connected the desk and crates with a large piece of corrugated cardboard (Fig. 15). They checked the desk chair for height, and finding it too high for comfort, they moved it out and brought in two lower chairs. They now discovered they could move out the bookcase, as the orange crates would easily accommodate their books. With the ceiling light on and the lamp centered at the end of the desk beside the window, they both had adequate light for work. Eve and Mary then collected all the things they wanted at the desk. They sorted and organized, and by using cardboard for testing, they planned partitions, shelves, and slides in the orange crates. Finally, they decided to get more storage space by substituting two more orange crates for the now useless desk (Fig. 16).

FIG. 16. Eve and Mary are shown using their new desk. The small original desk was replaced by two extra orange crates. Notice the ample room for both to spread out their books and papers; the good posture of the students; adequate light for both; the convenient arrangement of pencil sharpener, ink, pencils, and the like; the orderly and handy arrangement of books, papers, and folders in partitions in the crates.



The second problem was to make the clothes closet less of a menace. The girls especially wanted to clear the floor of shoes. Somebody had the bright idea of putting the tall narrow bookcase into one end of the closet. It just fitted and took care of nearly all the shoes, and a shelf laid on the baseboards at the other end of the closet would take the overflow. Then they unearthed a rod long enough to extend lengthwise of the closet, a distinct advantage over the crosswise rod they had been using, as it took more clothes with less crowding. The installation of more accessible shelves for hats was left for the future.

The question of moving out one dresser was reconsidered. Mary took out the top drawer and placed it on the bed, and demonstrated how she hunted for a tie, using a paw-and-claw method that was, judging by the merriment, familiar to all. It was finally decided that both bureaus were needed, but that the confusion could be reduced by trays and partitions in the drawers and by throwing out some of the unnecessary things.

Mary and Eve tried their new desk arrangement for a week, and then made it permanent. They reported to the class:

> We decided to build a more stable desk, using the ideas in our temporary setup. We first investigated the kinds and costs of materials we needed to complete the job. We decided on heavy five-ply wood for the top to bear the weight of the typewriter and all the things we wanted to keep on top of the desk. Next we went to a grocery store and asked for some orange crates, all alike. We got three-ply wood for the partitions we wanted in the orange crates for our storage space, and also some paint to blend well with the rest of the furniture in the room. The problem of putting the partitions in, whether they should slide or be fastened down and how we were to do it, bothered us for quite a while. It wasn't until we went on a kitchen conference last week that we had an inspiration. The specialist showed the women a little file box with various methods of installing partitions, and one of them seemed to be the answer to our difficulty. Screw eyes were put in the sides so that the partition could slide back and forth easily [between these screw eyes] yet would stay in the place wanted. With that at hand, we went right to work and finished up our desk easily. We had previously sanded the orange crates, and painted them while listening to football games on Saturday afternoons.
>
> *Satisfactions of the new desk for both of us:*
>
> 1. The room seems much more livable, and there is less strain in avoiding shin bruises when encountering stray chair legs.
> 2. We like to work across from each other. We find that we share more ideas, activities, time, and work than we did before.

3. We get a lot more studying done.
4. It is much easier to clean the room.
5. It is possible for us to keep many more things on the top of our desk which we feel are necessary, the pencil sharpener, the plant, ink, glue, box for pencils, rulers, cigarettes, and ashtrays.

Satisfactions for Eve:

1. It is the right height for typing and my feet reach the floor.
2. The typewriter is conveniently kept between the two outside orange crates and can be easily switched to the bottom of the bed when I want to write by hand and type later.
3. The typing paper is conveniently situated in the top partition of the right-hand orange crate. The books below it and my manila folders in the partitions below them are all easily accessible.
4. My correspondence and sewing centers on the other side are not worked out as yet, but I know that I want them there.

Satisfactions for Mary:

1. There is enough storage space for a large accumulation of material where it is convenient, easily found, and where it is used.
2. There is a place for correspondence.
3. I like the warmth of the radiator.
4. There is a place for my plant on my side of the desk, where I can watch it grow.
5. The desk is the right height for me.
6. The bureau with the nail facilities is easily accessible without getting up from the desk.
7. The calendar at my right on the wall is also a great help.

Eve married as soon as she graduated. Mary secured a job with the Farm Security Administration and later married. Both moved to different states. Four years after graduation they wrote as follows:

Mary: You may be interested to know that Eve and I didn't destroy our desk when we left school. We dismantled it and each took our respective halves. With a few minor changes, I turned mine into a file and used it to store the endless amount of notes, literature, etc., we collected in school. It's grand to have it all in one place and in such good order.

Eve: You might be interested to hear that I'm using the two orange crates in my home that I had for my end of our famous desk. One is nailed up on the kitchen wall over my baking center and the other under our desk for John's files and farm records. I could use a good kitchen conference in my kitchen. It's a combined kitchen, nursery, laundry, and dining room, and sometimes it gets a bit confused especially when Peggy gets all the pots and pans out and scatters the clothespins.

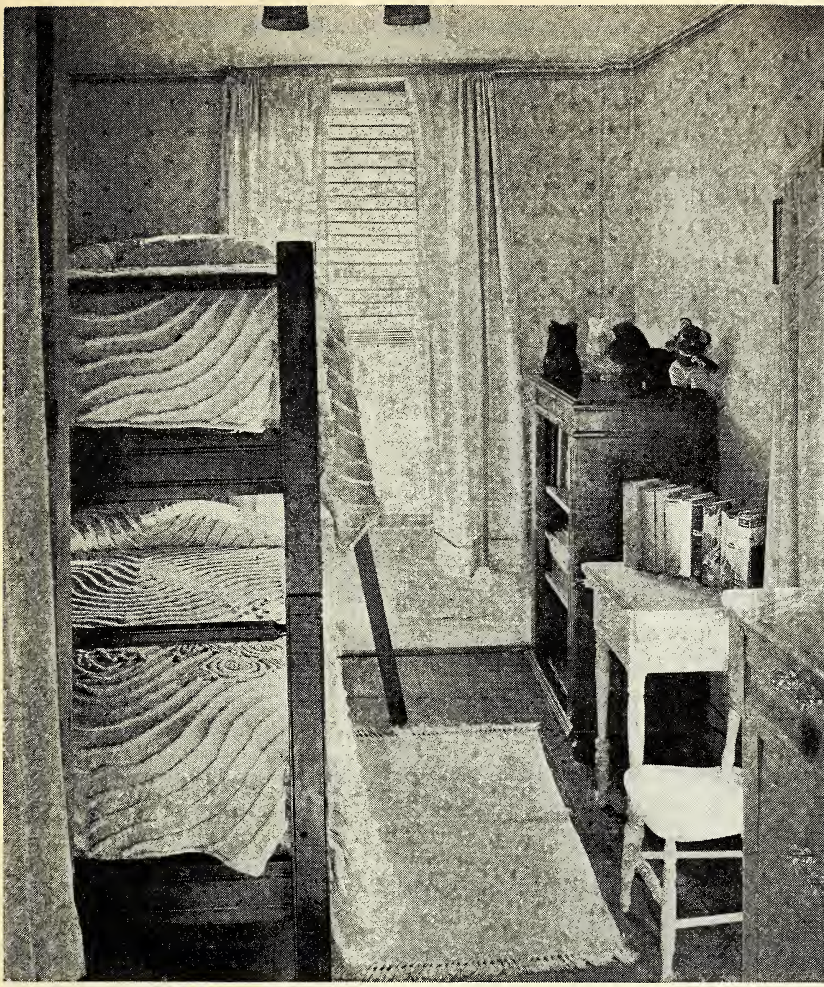


FIG. 17. This is the room shared by Norah and Jane. There is only a narrow passage between a built-in clothes closet and the bunks at the left of the hall door, and a bookcase, table, chair, and bureau at the right. There were no facilities for study and the uselessly large bookcase and the wholly inadequate table were little used

NORAH AND JANE

Norah Willis was a senior in college and her sister, Jane, was a junior in high school. They were town girls and lived at home. Their mother, a trained nurse, was frequently called off on a case and when this happened, Norah and Jane assumed responsibility for the housework, sometimes including the family washing.

This encroachment upon their study time would not have been so bad had there been a quiet and convenient place where they could study. Their room was tiny and the passageway between the bunks and the wall seemed to offer no opportunity for a study center (Fig. 17). The large living room and the dining room occupied nearly the entire first floor, and a wide opening with columns made these more like one room than two. The girls' father was in the radio business and the rooms were well equipped with radios, one of which was usually on. This was a hospitable family, and frequently in the evening guests dropped in or customers called. It all made an interesting and pleasant family life, but Norah said that if she and Jane wanted to study they had to sit in an easy chair in the living room with their books perched on their knees while people were talking or radios going. While this was fun, it was not conducive to good study. Their parents appreciated this problem, and Mr. Willis had drawn up plans to make a desk for them in his workshop; but he was spared this by Norah's calling in her class in home management to help solve the difficulty.

The girls' room was exceedingly small. Bunks and a built-in clothes closet were on the wall at the left of the hall door, and a bookcase, table, chair, and bureau lined the wall on the right. This left a narrow passageway between. As the bookcase and table were pretty useless, the group moved these out and, inspired by the desk for Eve and Mary, brought in orange crates and large pieces of wallboard from the workshop (Fig. 18). At first they considered separate desks, one under the window at the end of the room and the other opposite the bunks; but the chairs bumped into each other when either girl stood up, and the bunk ladder was in the way. They next considered two desks in one along the side wall, using eight orange crates and leaving just enough room between crates for knees. Finally they decided upon six crates — one back of another in the center, and two at each end — as this gave plenty of freedom for knees and also room to push the chairs into when they were not in use. When measured for height, the crates proved to be too low, so they raised the surface and steadied the crates by making the desk top of a piece of five-ply wood about an inch thick. Since it was more convenient to keep books on a shelf over the desk than in the orange crates or on the desk, they planned a shelf at a height they could reach while

FIG. 18. The student management conference that solved the study problem fo Norah and Jane found that it was faced with a good many difficulties. The new desl must be large enough for two persons; room must be found somewhere — preferabl at the desk — for all study materials, including books; light must be provided at th desk; and room must be left in the passageway for two chairs. The students began b removing the bookcase and inadequate desk. They brought in orange crates to hol papers and other study materials, and chose plyboard to use for a desk top. The experimented with different arrangements and tested for the girls' correct stud height. Five-ply board gave what additional height was necessary and its weigh steadied the crates. The girls planned a shelf over the desk to hold textbook

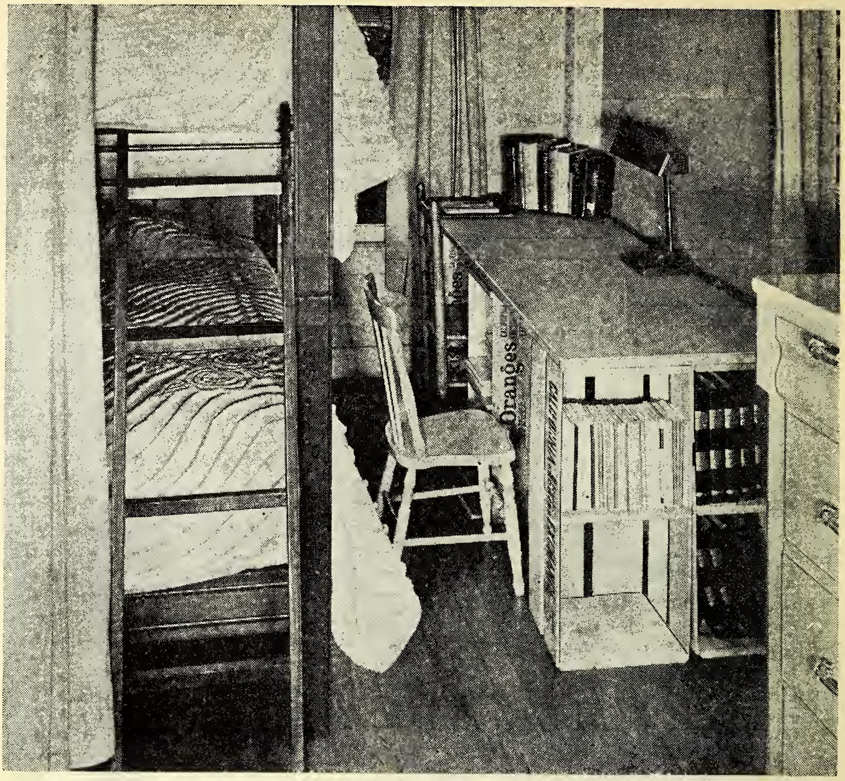
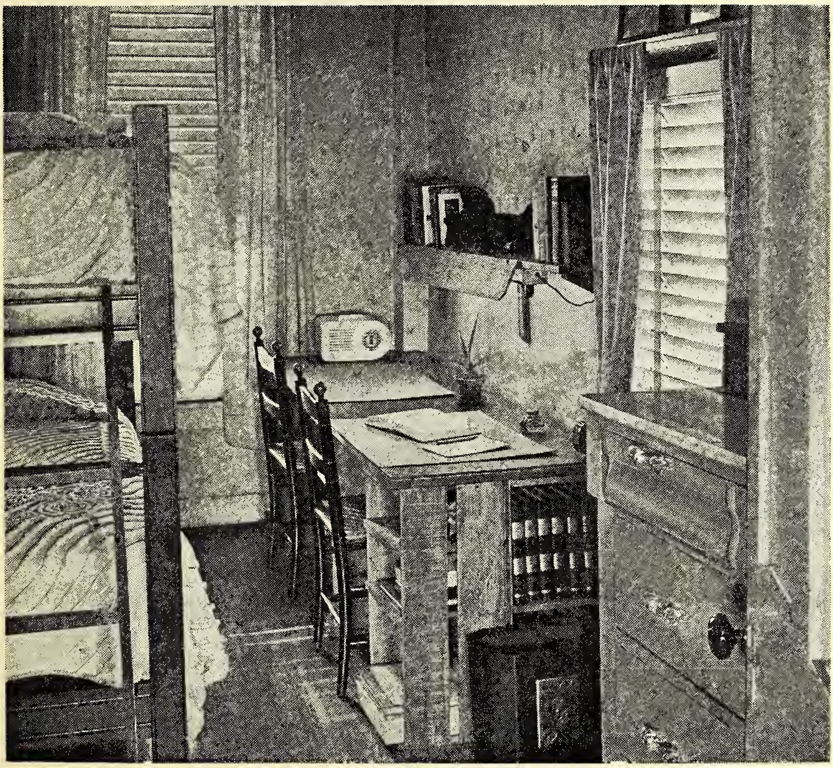


FIG. 19. Norah and Jane used this tentative desk plan for a week. The six crates are arranged to give each girl knee room and space to push the chair into when not in use. The two middle crates, besides adding storage room and supporting the top, permit each girl to have comfortable elbow room. The girls plan to have either an extra lamp or a long fluorescent light if they decide to make the desk permanent.

seated. The reading lamp was only large enough for one desk, so they would need another one. The girls were to try out the temporary arrangement for a week (Fig. 19), managing without the second lamp and the bookshelf.

When the class returned, Norah and Jane had made some changes in the original plan and added new features (Fig. 20). They had taken away the magazines and turned the front crate around and made shelves in it to hold study materials. They had put up the bookshelf, and their father had given them a new long fluorescent light which they had shaded with a piece of plywood both to protect their eyes and to direct the light onto their work. Since with the ladder at the side it was impossible for the girl at the back to get into bed without disturbing her sister at the front desk, they moved the ladder to the end of the bunk. They sanded the crates and stained them to match the beds, doing all the work themselves, with the exception of installing the light. The cost was 60 cents for materials and $8 for the light, and they considered the output of time, effort, and money decidedly worth while. Although in this arrangement of their study center neither girl has the natural light from the windows to her best advantage, this was considered of relatively less importance because of the fact that both girls did most of their studying at night.

FIG. 20. For the final arrangement of their desk, Norah and Jane made several improvements in their trial desk; compare it with Fig. 19. There is now ample work surface, and adequate space in the crates for papers and notebooks. The desk is freed of both lamps and books, and the shelf of books is within easy reach. The fluorescent light is properly shaded to protect their eyes and throw the light onto their work.



Mr. Willis made them a clothes closet, a wide shelf extending from the corner of the room to an upright support near the bunks (Fig. 21). A second shelf at the top held hats and suitcases, a rod below this supported hangers, and a shelf at the bottom took their shoes. In front was an inconspicuous heavy monk's cloth curtain the color of the walls.

Norah married the following year and left home, and Mr. Willis made the desk smaller for Jane.

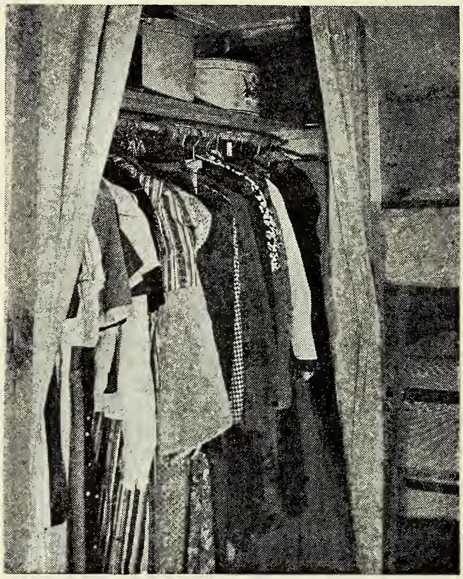


FIG. 21. In the closet for Jane and Norah, a shelf near the floor takes all their shoes.

SUGGESTIONS FOR STUDY AND INVESTIGATION

READING:

Frederick Winslow Taylor, *The Principles of Scientific Management*, Harper & Brothers, New York, 1911.

Lillian M. Gilbreth, *The Homemaker and Her Job*, D. Appleton-Century Company, Inc., New York, 1927.

Ralph M. Barnes, *Motion and Time Study*, John Wiley & Sons, Inc., New York, 1940.

1. Discuss Mrs. Gilbreth's part in the application of principles of scientific management to the home.
2. Ask a member of the department of industrial engineering at your engineering college or an industrial engineer from some near-by plant to talk to your group about motion and time study. If possible, arrange to have this talk illustrated by motion pictures.

3. Find out about the recent upsurge of interest in motion and time study or work simplification in the home and on the farm. Discuss the factors contributing to this interest, and the possible adaptation of work simplification methods to housekeeping, especially to help meet the labor shortage brought about by the war. Find out from the United States Department of Agriculture at Washington, D. C., where motion picture films of household tasks may be borrowed or purchased.
4. For one night keep track of the time required to do your studying or to write a paper, the number of outside interruptions, the number of times you had to get up to get something you needed, and the articles that would make studying easier if you had them. Consider the height of your chair and desk from the point of view of comfort, and the quality, amount, and location of your light. Suggest ways in which you could handle the problem of radio and guests during your study time without depriving yourself of your favorite broadcasts or the pleasant association of friends.
5. Make a floor plan of your room. For one night draw in the lines of travel as you collect all the things you use in studying. This is a flow chart. Study this chart and see how by the elimination, addition, or rearrangement of study equipment and materials you can cut down on the length and number of these lines. Rearrange your study center and make another flow chart. Compare this with the first.
6. In 4 and 5 above, how much travel have you saved? How much time have you saved?
7. Study in a similar way some other task that you carry on in your room or in your home. Time the task before and after you make changes. How much time did you save? Did you find the task irritating? If so, how do you account for this?
8. Look up a few reliable references on good lighting. Give evidences that they are reliable.
9. On the basis of your understanding of good posture, consider the chair you are sitting in. Can you maintain good posture in it easily? If not, what is wrong with it? What physiological effect has it on you? Is your table or desk the best height for you? What can you do to either table or chair to improve your own comfort and posture? Find out about chairs that are made to fit; about those that can be adjusted.
10. What household tools have you at home? Where are they kept? Do you have any special tools for the women of the family? Do they stay where they belong? If not, why not? What tools are needed to make simple repairs and conveniences around the house? How much would they cost?
11. Can you use tools effectively? If not, try to enlist the services of some male friend or member of the family to teach you to handle tools sufficiently well so that you can make small repairs and conveniences.
12. Look up books, bulletins, or magazine articles on the use of household tools.

CHAPTER 5

THE DUNCANS MANAGED BY ADAPTING TO CIRCUMSTANCES

The Ladies Aid Society of Woods Settlement suggested that Mrs. Duncan request a kitchen management conference, since a small sum of money would be available to improve the parsonage kitchen. In 1939 a class of home management students worked with her on her kitchen, and a later class visited Mrs. Duncan to see the changes that had been made and to learn about her way of managing.

"We married on a shoestring," Mrs. Duncan told the group of students gathered in the living room of the parsonage in a village near X. She and Mr. Duncan had met while he was studying for the ministry and she was doing graduate work in sociology and part-time work with a family welfare agency. As soon as Mr. Duncan finished his seminary training they were married and went to a rural church in Kansas. "We married on a shoestring, but our financial situation was even more precarious a year and a half later." For at that time Mr. Duncan resigned his position to do advanced study in history. He wanted to teach, and now if ever was the time to make the change; so with only their ambition, their courage, their health, and their willingness to face any deprivations, they took their four-months-old daughter and moved to R, where Mrs. Duncan's father was on the university faculty. There, each secured a part-time job which brought in a total of $70 a month, and Mr. Duncan started graduate work in history. For any real emergency or calamity they would have had to fall back on her family or his, but "We did not believe anything would happen to us, and nothing has."

The following year they moved to Woods Settlement, a small village near X. Mr. Duncan continued with his graduate work in the university and earned a living for them as pastor of the community church. They lived rent free in the parsonage, were able to rent a room to a student, and on Mr. Duncan's cash salary of $54 a month managed well and happily.

"We don't want a lot of money or material things for the sake of having them," Mrs. Duncan said, "but we do want a comfortable home and children, we hope in a college town where Mr. Duncan can teach." Their parish was most friendly. On their arrival the members of the congregation had given them a "shower" of home canned foods; at present they wanted to improve the parsonage kitchen.

Mrs. Duncan tried to do her work the easy way. To avoid heavy weekly cleaning she put her house in order every day, and was usually done by ten o'clock. She did all the laundry, except the heavy bedding, with no other facilities than the kitchen sink and two pails. After lunch she took a nap when the baby had hers, and in the late afternoon she took the baby and made social calls on the parishioners. Frequently she entertained such church societies as the Ladies Aid and the young people's group. Mr. Duncan shared in the work of the home. He helped take care of the baby; he usually dressed her in the morning and got her ready for her nap and for bed at night.

Mrs. Duncan felt her major problem to be diet. The planning of varied and nutritious meals was difficult on a limited income with no refrigerator for keeping food, with no car, and with the stores beyond easy walking distance. Ordinarily she bought one large order of groceries a week. Mr. Duncan walked to class, but could carry back only small packages. Occasionally, perishable foods were delivered at the door, though that meant trading with a high-price store or paying a delivery charge. Therefore they bought very little fresh meat, and had to rely heavily — too heavily — on meat substitutes and canned foods. The baby had grown up on a certain brand of condensed milk, and while Mrs. Duncan thought some change might be wise, she did not know what change to make. She had studied nutrition in her social work training, but her inability to get to town and the limited facilities of the house and the village cramped practical application of what she knew. She needed a new dress for her social activities as a pastor's wife, but she did not feel that she could afford to buy one. Although three dresses that had been given to her could be made over, she had never done any sewing and was awkward with the needle.

The group went to the kitchen. It was small, with three doors and a window, and contained a coal stove, a sink, a kitchen cabinet, and a built-in cupboard. As Mrs. Duncan talked, it became apparent that she was almost naively unaware of its major deficiencies. She was the child of missionary parents and was accustomed to manage with little. She had gone without laborsaving equipment for so long that she no longer thought about it. But she was most keenly aware of the low height of her working surfaces, especially the sink, because she was unusually tall; and she was continually hampered by the lack of a place to keep large cleaning equipment such as mops and brooms, and the absence of storage space for fresh fruit and vegetables bought in quantity. She had mastered the coal stove, and she had partially solved the problem of the height of her work surfaces by doing as much work as possible sitting. The cellar would require considerable reconstruction to make it suitable for the storage of fruits and vegetables, and she felt strongly that too drastic changes in the house would not be sensible, as they might not be living in this house after Mr. Duncan got his degree.

Mrs. Duncan charmed the students by her personality. They recognized the ease and intelligence with which she managed and they responded to the happiness the Duncans were squeezing out of their limited resources. Following this visit the students divided into three groups, according to their major interests, to study Mrs. Duncan's problems: buying and nutrition, kitchen equipment and its arrangement, and clothing. Each group selected a chairman and made its own plan of procedure. Representatives from each group formed a general committee to compile for mimeographing the group findings.

A brief description of each group's procedure follows, with an abstract of their investigations.

GROUP I. BUYING AND NUTRITIONAL PROBLEMS

Ten students who were taking marketing or foods and nutrition courses, or both, volunteered to work on this committee. Each student worked on a special problem she chose to investigate but some overlapped. They outlined the following subjects for investigation: delivery service; buying canned milk, fresh vegetables, staples, and canned goods in quantity; good nutrition at minimum cost.

Delivery Service

Purpose: To discover a convenient, inexpensive way of marketing by phone at some store which delivered at Woods Settlement.

Obstacles confronting Mrs. Duncan: Lack of information about delivery service of different stores, and unfamiliarity with products and services offered.

Procedure: Store visits were made and a chart prepared with information about fourteen stores in X concerning delivery service, charge accounts, week-end sales, brands carried, and the general impression made by the store. The student conferred with her marketing instructor on purposes, methods of procedure, and results.

Buying Milk

Purpose: To provide an inexpensive and wholesome form of milk for the family and especially for the baby.

Obstacles confronting Mrs. Duncan: Lack of information as to whether evaporated milk was nutritious enough for optimum health, and lack of knowledge about desirable brands of evaporated milk, where such milk was available, and whether or not the store delivered to Woods Settlement.

Procedure: Different stores and their brands of evaporated milk were studied and a chart was made. Nutrition charts were drawn, showing the advantages and disadvantages of fresh and canned milk. Two instructors in foods and nutrition were consulted and approved the final report.

Quantity Buying of Canned Goods

Purpose: To determine whether it was practical for Mrs. Duncan to buy canned foods in large quantity.

Obstacles confronting Mrs. Duncan: Lack of information as to the advantages and disadvantages of buying in large quantity, and unfamiliarity with what was on the market.

Procedure: A chart was prepared of the comparative prices of canned goods — four vegetables, three fruits, salmon, and tuna fish — in seven different stores in X, and of the advantages offered by each store for buying in quantity.

Good Nutrition at Minimum Cost

Purpose: To inform Mrs. Duncan about family nutrition and minimum daily food requirements.

Obstacles confronting Mrs. Duncan: Limited funds, and lack of knowledge concerning certain specific food problems.

Procedure: A list of the minimum food requirements for adults and children was given to Mrs. Duncan, together with suggestions for meeting these requirements at each meal. Information was collected concerning Mrs. Duncan's specific food problems, and either charts were made showing comparisons or statements were given regarding each.

Mrs. Duncan reported that as a result of the class study she was able to save money by purchasing more economically, and was better informed on the selection of foods and household supplies. She had been helped by the bulletins containing menus and recipes. She had worked out a marketing plan: to make one large order of staples each month at a chain store with which she was not familiar previously; to buy meats, bread, eggs, and fresh vegetables at another chain store that carried charge accounts and offered free delivery service.

GROUP II. KITCHEN EQUIPMENT AND ITS ARRANGEMENT

Fourteen students cooperated on this problem and divided into smaller groups for the following investigations: sink center; space arrangement in the kitchen cabinet and built-in cupboard; food storage center; facilities for laundering and cleaning; and selection of small equipment.

Abbreviated reports on the sink center and on small equipment are given here.

Sink Center

The height of the sink and work table was the major problem, since it was the greatest source of Mrs. Duncan's fatigue. The group worked out several solutions. The first cost least, but the others, though slightly more expensive, made the kitchen more attractive. The sink was only 25 inches from the floor and the table at its right was even lower. An ungrooved drainboard, some foot and a half square, joined the sink on the left, and when dishes were drained water dripped from both sides. A small shelf above the drainboard held soap chips and other dishwashing equipment.

The sink could be raised 7 inches, to Mrs. Duncan's correct working height, by lengthening the iron drainpipe in the cellar and by coupling 7-inch nipples to the hot and cold water pipes. The drainboard drip could be eliminated by a new board, grooved and waterproofed and reinforced on three sides by 1-inch strips of wood. The table could be lifted by 7-inch blocks under the legs. An instructor in agricultural engineering, who was a neighbor of the Duncan's, volunteered to find the necessary lumber and finish for the drainboard. The cost would be:

iron pipe	$0.25
2 nipples	0.11
2 couplings	0.12
drainboard and blocks	0.00
	$0.48

Since the sink was in direct line with the front door, the iron drainpipe was conspicuous and unsightly. A neighbor offered to enclose the sink in a wooden cupboard at no expense, or a chromium-plated tail pipe, costing $1, could replace the iron pipe. A metal drainboard would involve an additional expense of $2.79.

It was further suggested that a shelf be put over the table to provide a long working surface on which to prepare food and stack dishes. The dishpan could hang below this, and the table, used occasionally for eating, could slide beneath it and be kept clear. The cost would be:

raising sink	$0.48
2 brackets to support shelf	0.10
lumber for shelf (if not found)	1.25
Total	$1.83

The sink was not raised. Mrs. Duncan hesitated to do so because they planned to be in the house only a short time and, since she was unusually tall, the new sink height might be as awkward for her successor as this one was for her. Her own system of sitting as she worked at the sink and table was not too inconvenient, and saved her strength.

Small Equipment

Situation, purpose, and obstacles: The possibility of moving away deterred Mrs. Duncan from investing freely in small equipment. The students tried, therefore, to meet her needs without much expense. At this time she was using a kettle for a dishpan and two galvanized pails for laundry tubs. She had no kitchen stool and she wanted one that could be adjusted to different working heights. The broom she used had been abandoned by the previous tenant and was stiff and hard to use.

Types, convenience features, and prices of kitchen stools, dishpans, small tubs, and brooms were obtained from local stores and mail-order houses while magazines, bulletins, and other sources of information were studied. An adjustable stool and a stepladder stool from the home management laboratory were loaned to Mrs. Duncan to try out at heights corresponding to those of stools on the market. Prices and features of the various pieces of equipment were tabulated to help Mrs. Duncan in making her decision.

Later in the year Mrs. Duncan purchased a stool corresponding in height to the highest adjustment tried, a dishpan and rack, some dishes, a wastebasket, and other small pieces of kitchen equipment. She also bought a washing machine and two tubs from a mail-order house.

Mrs. Duncan said that the biggest contribution by the class was in making her aware of a basic energy-saving principle of kitchen planning: arrange equipment to save steps and to save stooping and reaching.

GROUP III. CLOTHING PROBLEMS

It was a pleasure to think of new dresses for Mrs. Duncan, for she was tall, good looking, and carried herself with distinction. A student whose major interest was clothing conferred with Mrs. Duncan on her needed "best" dress. Of the three make-over possibilities, two were washable and one would need to be dry cleaned. The two pored over fashion magazines brought by the student and decided that the dresses needed only simple changes, such as puffed sleeves fashioned from a shoulder cape for one, and contrasting revers for another. Mrs. Duncan proposed hiring a dressmaker, but the remodeling of the dresses was done by the student and was counted as class work.

As in the other homes, the students got from their work with the Duncans practical and spiritual values disproportionate to the size of the problems presented. The value was in the processes applied in their solution. The students had to make practical use of their studies, rounding up in one concrete situation what they were learning about foods and nutrition, marketing, clothing, and agricultural engineering. They had to plan their time so that it would not encroach upon time needed for other course work. They had to confer with instructors of other departments and not impose on them too much. They had the experience of working both alone and as members of a group, with minimum supervision from the instructor. They had to identify themselves with Mrs. Duncan; ignoring how they would prefer to do a thing, they had to see her point of view. They had to work with limited resources and discover that established standards do not always apply.

Spiritual values were not the least gain. There was something very heartening in Mrs. Duncan's wholesome optimism. In the following fall, when the new class in home management visited Mrs. Duncan, they found that she was expecting a baby in January. She knew that several girls in the class were planning to marry within the year. "Believe it or not," she said proudly, "we *want* this baby." Most of the students had taken, or were taking, courses in family life and child development, and their spontaneous questions indicated their great interest in Mrs. Duncan's prospects and far outweighed in number Mrs. Duncan's questions concerning care of the baby after her return from the hospital. Mrs. Duncan was radiant with health and optimism. Everything about her stay at the hospital and her days of convalescence at home had been arranged for.

However, in spite of her optimism Mrs. Duncan did not return from the hospital as soon as she expected. Complications set in, and she had a long and serious illness. Even after her return Mr. Duncan carried the whole of the housework, including the laundry and cooking. He gave up his studies at the college and took a temporary extra job to pay hospital and doctor bills. Fortunately these were not large — only $250 — although Mrs. Duncan was in the hospital five weeks. They were paid before the baby was five months old. A few months later Mr. Duncan secured a position with a church in a city. Below is a letter from Mrs. Duncan.

We left X last May, 1940, when Betty was three years old and Helen four months. In Y, Mr. Duncan was assistant pastor. We lived in a small four-room apartment with a screened-in porch, in a four-family building. It was lovely and convenient. There was a good-sized yard and the neighborhood was ideal for a family with children. Betty attended the nursery school at the university.

That position proved to be rather temporary, for we were anxious to have a church of our own. So in October 1941 we moved to Z where Mr. Duncan is pastor of the First Presbyterian Church and also serves a small church about five miles out in the country.

We are happily settled in a nine-room house with a good-sized yard. The children have two rooms of their own: their bedroom and the sun porch. We are even prosperous enough to have acquired a 1937 Dodge, of which we are as proud as if it were a 1942 Packard. We have also bought a few pieces of furniture.

Friends seem to be good to us wherever we go. Those in Y gave us a wonderful send-off and a generous gift of money, and the Z folks put the Manse in tip-top shape for our coming and had a reception and food shower soon after we arrived.

We both have work that is challenging and interesting. My main occupation is still that of homemaker, but I find quite a bit of time for church and community activities.

I wish that you could see my kitchen — if you still have memories of the one I had in Woods Settlement — all newly painted and linoleum laid, a gas stove, new kitchen cabinet, work table and chairs, and a recently purchased gas refrigerator. The rest of the house is just as convenient and livable. Betty, at the tender age of five, is already learning to be a little homemaker. She works with me every morning and can set the table, wash and dry the dishes, empty the trash, help make beds, sweep the sidewalks, run innumerable errands, keep track of her little sister, etc. She loves to keep busy. I don't insist that she do any of these things, for I don't want them to become a chore.

I really profited by my experiences with the home management students. I even gave a talk about them to the Home Economics Club at the high school. You might be interested to know that since Helen's birth my backaches have entirely disappeared. I wonder if I should give credit to Helen or to the students who taught me how to save stooping and bending.

Strange as it may seem, we are both better satisfied with our situation here than we have ever been before and we've been happy elsewhere too, as I'm sure you'll agree. Mr. Duncan seems to have found his proper niche, and we are all so pleased that it is in the ministry. We *do* like college environment and are hoping that he may sometime have a university pastorate. That would be a happy combination of the ministry and his interest in college teaching, which seems to be, after all, mainly an interest in young people of college age.

SUGGESTIONS FOR DISCUSSION AND INVESTIGATION

1. Compare the extent to which (1) chance, (2) finances, and (3) conscious planning may have led Mr. Duncan to return to the vocation he originally chose.
2. How did Mr. Duncan's work affect Mrs. Duncan's problems in the home by (1) circumscribing her freedom of action, (2) imposing upon her (*a*) conventions and (*b*) ideals of community service, (3) making any definite period of residence uncertain? Discuss Mrs. Duncan's adaptability to these problems and how it affected her home management.
3. Why do you think the Duncans felt secure in "marrying on a shoestring"? What other kinds of security are there that make it "safe" for couples to marry? What are the dangers of marrying with no financial security?
4. Discuss how far, in your opinion, family help should be accepted by young people (1) after college, (2) doing postgraduate work when married, (3) after marriage, (4) in emergencies after marriage, (5) with changed conditions of health and vocational opportunity after the war.
5. Discuss the relation of home management to other fields of study, as demonstrated by Mrs. Duncan's project.
6. What problems did Mrs. Duncan have that you have at home? Compare your methods of solving them.
7. Look up material on working heights. Refer to Chapter 16, pp. 275, 285.
8. Is your sink at home too low for the person who uses it? Place a pie tin under the dishpan, check for posture and comfort. Increase the height gradually by using higher pans or pieces of board until the dishpan seems too high. Remove some risers until you find the height most comfortable for you, and test this height for a week. Investigate the cost of raising or lowering the sink. Use the same method to determine the most comfortable heights for different activities, such as beating eggs, cutting out a dress, kneading bread, preparing salads, ironing, etc.
9. Sit down for such tasks as preparing potatoes, washing dishes, ironing, etc. If this seems awkward and uncomfortable, (1) is your stool or chair the right height for the work surface you are using; (2) have you a back support, (3) a foot rest, (4) knee room? How can you correct the heights of stools and work surfaces in your home?
10. How do poor posture, stooping, and stretching affect women who are pregnant? Discuss this with a physician.
11. How can intelligently planned work centers in homes affect the life and health of family members? Illustrate from your own experience or that of someone you know.

12. How does the so-called "streamlined kitchen" meet the problem of the different height-surfaces needed for different tasks? Illustrate your points with magazine advertisements.
13. Secure a home economics college catalog from your state college and from other colleges if possible. Look up courses that could help you with problems of delivery service, milk buying, quantity buying of canned goods, good nutrition at minimum cost, convenient kitchen arrangement, raising a sink, selecting utensils, remodeling clothes, whether or not to marry on a shoestring, or other problems that may confront you. List other possible sources of information or help on such problems.
14. What in your opinion do students gain by working in small groups to solve, as with Mrs. Duncan, home management problems? What might be some of the difficulties involved in this type of teaching? How might these be avoided or overcome?

CHAPTER 6

THE EAGANS MADE A LONG–TIME PLAN

The report that follows is of one of the earliest attempts to bring students and homemakers together for mutual help in better home management. Mrs. Eagan was on the executive committee of her county Home Bureau and through this agency requested the help of a home management specialist in making her kitchen as convenient as possible at little or no expense. As no home management project was under way in her county at this time, the request was referred to the home management instructor at the state college. The latter called on Mrs. Eagan and arranged for a kitchen conference in which five students and some of Mrs. Eagan's neighbors should join. To demonstrate her difficulties, it was decided that Mrs. Eagan would wash her luncheon dishes.

The Eagans lived on a farm about five miles from the college. The house stood close to the road, and from its wide porch spread out broad clean meadows with wooded hills beyond. The room in which students and neighbors gathered was one of those large farm kitchens that serve both as dining and living room.

There were now four of them, herself and her husband and two little girls, one nearly four and the other six. They had bought this farm when the first baby was little, five years before. It had been necessary to stagger the improvements on the place over a term of years, and they had at the start written out a long-time plan which they had checked off or revised as the years went by. The first year they had put a garage under the house at relatively small expense, as Mr. Eagan did all the work himself. The second year they had installed a hot air furnace at a cost of $200 and wired the house for electricity, with a pump for running water in mind. Running water and a new baby came the next year at a cost of another $200. The fourth year a toilet and a septic tank were installed for $75. This last year they had painted the house and put on a new roof at an outlay of only $50 for shingles and paint, as Mr. Eagan traded some farm machinery in exchange for labor. Their tentative plans for the following seven years were as follows: next year, have a new baby and trade in their old car for a new one at an estimated cost of $200; second year, install a new bathroom; third year, repaint the house and landscape the grounds; fourth year, make a new kitchen from a present storeroom; fifth year, renovate the dining room and put in a fireplace; sixth year, replace the car; seventh year, make a playroom for the children. In four years, therefore, Mrs. Eagan hoped to have a new kitchen, but right now she wanted to make her present setup as convenient as possible without much expense. After all, now was when she wanted to enjoy her children and take part in community activities. Dishwashing was her particular cross. It seemed plagued with irritations she could not eliminate. "In my new kitchen the one thing I'm going to have is a sink in front of the window facing the garden. Then, when I have to wash the dishes I can see flowers beyond."

The group decided that it might work out better if each person present concentrated on some one single operation while Mrs. Eagan washed her luncheon dishes. Each should note down ways in which this operation might be simplified, as, for example, by a change in method of work, by the use of different or additional equipment, or by a change in the arrangement of the equipment. All questions should be saved till the end of the demonstration. A mimeographed list of dishwashing operations was cut up and passed out to the members of the group for study.

SUGGESTIONS FOR DISHWASHING STUDY

1. Time the job.
2. Check the number of trips during the complete process of dishwashing, including clearing the table and putting away the dishes, from
    a. dining table to place where soiled dishes are stacked,
    b. sink to stove,
    c. sink to place where dishes are stacked,
    d. sink to dish cupboard,
    e. sink to utensil cupboard,
    f. sink to cabinet or work surface,
    g. sink or other work surface to place where garbage is disposed of,
    h. other trips.

    Measure the distance covered in each trip, and figure the number of feet traveled in performing the task.

Could any of these trips have been avoided or shortened by
   a. a different method of work,
   b. new pieces of equipment,
   c. rearrangement of present equipment?
Explain how in each case.

3. How many times was the silver picked up and laid down during the entire process?
   Could any of these handlings have been omitted under present conditions? How?
   What is the minimum number of times that the silver needs to be handled?
4. Were both hands used to their highest efficiency in clearing the table? What method of clearing the table would require the fewest motions and the shortest time? Experiment.
5. Count the motions used in wiping a plate, through rinsing, draining, and wiping. Count the plates. How many motions could have been saved by air-drying the plates? Discuss the advantages and disadvantages of wiping and of air-drying dishes.
6. Is the dishwashing center adapted to air-drying dishes? If not, how could it be made so?
7. What causes streaks on air-dried dishes? How can this be prevented?
8. Is the sink or surface where dishes are washed the most convenient height for the worker? Test by trying different heights. If too low, how can the dishpan be raised? If too high, what can be done?
9. Were cooking dishes soaking and ready to wash? If not, what would you recommend? Why?
10. What seemed to be the most irritating operation in connection with the task? How can this be avoided or made less irritating?

Mrs. Eagan washed her dishes. When the sink was finally cleaned and the dishes put away, a lively discussion took place. Each individual argued for some suggestion that seemed practical to her, only to discover that by simplifying one operation another might become more complicated. It became evident, further, that certain suggestions, time-saving at the moment, would increase the labor and the time spent on other tasks performed at the sink. The four major changes that Mrs. Eagan thought would be most helpful to her were to move the refrigerator in the pantry nearer to the kitchen door, to take off the door between the pantry and the kitchen, to put casters or gliders on a table, and to rehinge a cupboard door so that it would open away from the sink instead of towards it.

The anticipated perfection of the new kitchen was an inevitable undercurrent to this discussion of the inconveniences of the present one. What, after all, are four years? What Mrs. Eagan really wanted was to have the class set up her plan (Fig. 22, p. 76) for the new kitchen on the home management laboratory floor, so that she could test it. They therefore adjourned to the present storeroom to get the dimensions of the room and the position of windows and doors, and to list her present kitchen equipment and to measure the large pieces.

Before the next class period, the students outlined the kitchen to scale on the laboratory floor, bolted panels together for walls, and set in windows and doors. They used homemade and makeshift equipment that had been assembled for a previous kitchen exhibit. This included an inexpensive enameled sink in a frame with swivel casters, two remodeled second-hand washstands for base cupboards with counters and open shelves above, a second-hand table that had cost $1, and a kerosene stove. Units of this equipment are shown on page 283. When completed, the room looked quite realistic. It was built around Mrs. Eagan's pet dream: to have the sink in front of double windows overlooking the garden.

Mrs. Eagan arrived bright and early for the class meeting. Two rough outlines of the kitchen had been drawn on the blackboard, and in one the equipment had been drawn in as planned by Mrs. Eagan and set up in the laboratory. Before seeing the panel kitchen Mrs. Eagan was asked to outline the work done in the kitchen: a typical day's work as well as the weekly and emergency tasks, and her husband's and children's use of the kitchen. These were written on the blackboard. Mrs. Eagan then went through the motions of a day's activities in the imaginary kitchen while a student drew in on the blackboard kitchen the lines of travel. With different colored chalks the student then charted the travel for periodic and emergency activities. When finished, the kitchen plan was filled with lines. Then Mrs. Eagan was ushered into the panel kitchen. She was delighted and said it looked just as it had in her imagination. But remembering the lines on the chart, she looked thoughtful.

The group then went back to the laboratory and concentrated on ways to eliminate some of the lines of travel. After a period of heavy thinking, Mrs. Eagan burst out: "If I move the sink near the dining room door and put the table in front of the garden windows, I can cut out about half the travel."

"But," said somebody, "you would have to give up your dream of having the sink in front of the windows overlooking the garden."

"Yes," said Mrs. Eagan, "but with the table in front of the windows we can all enjoy the view, and the children can play there and be out of my way when working. I think it would be better." She thought a moment longer. "There will still be a window over the sink even though it does not face the garden."

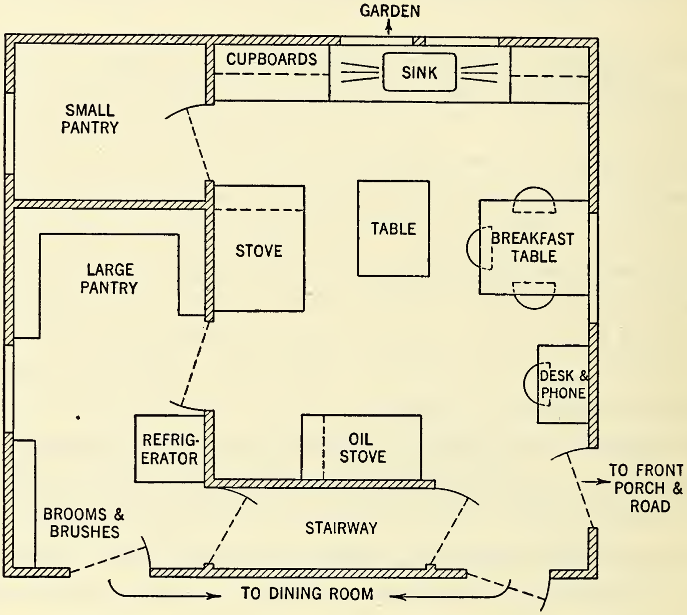

GARDEN
CUPBOARDS
SINK
SMALL PANTRY
TABLE
BREAKFAST TABLE
STOVE
LARGE PANTRY
DESK & PHONE
REFRIG-ERATOR
OIL STOVE
TO FRONT PORCH & ROAD
BROOMS & BRUSHES
STAIRWAY
TO DINING ROOM

FIG. 22. Mrs. Eagan's plan for her new kitchen, built around her wish to have the sink under the garden window. Her lines of travel extend clear across the room.

This change was then marked out on the blackboard plan, and the difference in the lines of travel was startling. Nearly half were eliminated. The group then went to the laboratory and rearranged the equipment to conform with the new plan (Fig. 23), and Mrs. Eagan tested it by walking out some of her kitchen tasks. She washed imaginary dishes to determine the type and height of the future sink. Her final comment was: "This arrangement seems ideal for me, and I never would have thought of it if I had not come over."

One of the purposes of this project was to test out the wall panels for class use. They had previously been used only for exhibits and had been handled by a janitor. The students worked hard the entire afternoon carrying these panels from a basement storeroom and bolting them together. The washstand cupboards were also heavy and hard to push around. It was obvious that for temporary setups lighter walls and equipment would be better. These were developed and finally made: canvas walls, curtains supported on gas-pipe frames, doors and windows of paper to be pinned on, and cardboard equipment that could be easily moved around (see Chapter 16, pp. 275 f. for description, and pp. 87, 118).

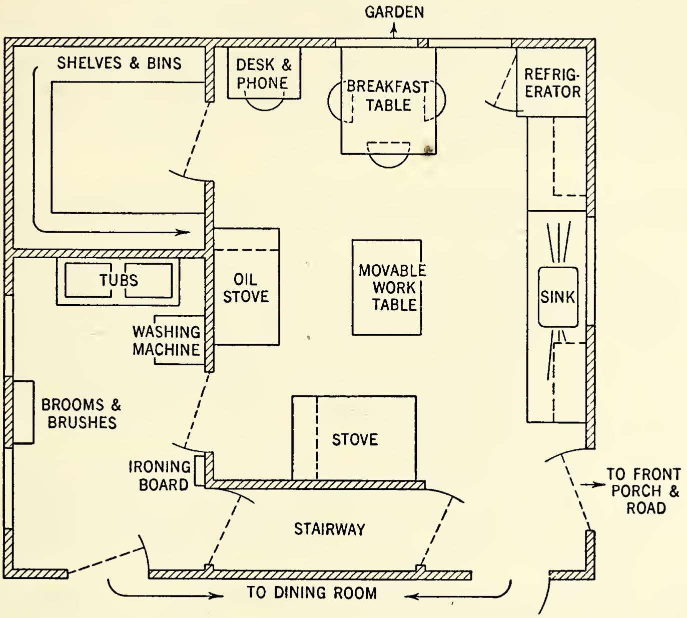

GARDEN
SHELVES & BINS
DESK & PHONE
BREAKFAST TABLE
REFRIG-ERATOR
TUBS
OIL STOVE
MOVABLE WORK TABLE
SINK
WASHING MACHINE
BROOMS & BRUSHES
STOVE
IRONING BOARD
STAIRWAY
TO FRONT PORCH & ROAD
TO DINING ROOM

FIG. 23. The revised plan for Mrs. Eagan's kitchen with the breakfast table in front of the garden window. Most of her travel is done in the forward half of the kitchen.

Two or three years after this first conference Mrs. Eagan's mother, who occupied one half of the house, moved away. This was the pleasantest part of the house and the Eagans gladly expanded into it. So the planned-for kitchen never materialized, but a very pleasant room was converted into a kitchen. Mrs. Eagan said that she had learned so much at the kitchen conference that she and Mr. Eagan had been able to plan and equip this kitchen alone, even to the cupboards, which Mr. Eagan built himself. The room is still not completed, but new improvements can be made easily without undoing much of the work that has already been done.

The current installment in the Eagan serial story is this, from a recent letter:

> The plan for improvement is really a "life-time" one and still in force. The large old kitchen that was, is now slated to be converted (with the addition of a fireplace and redecorating) into a pleasant hobby room with a nook for each member of the family, now five. The storeroom which was to have become the ideal kitchen of Mrs. Eagan's dreams will become the ideal workshop of Mr. Eagan's dreams, where he and his son (the third baby) may tinker to their hearts' content.

SUGGESTIONS FOR DISCUSSION AND INVESTIGATION

1. A number of dishwashing studies have been made and reported. Try to locate such reports and bring them to your group for discussion.
2. According to your own experience, what are the factors that seem to contribute to the disagreeable features of dishwashing? to the pleasant features? Discuss the relation between wasted motions and irritation in performing a task. Tell of some task that irks you. Analyze some of the factors that seem to make it irritating.
3. Try to arrange for the class or group to see a demonstration of dishwashing in the home of a member of your class, or in that of some friend or interested homemaker. Apply this home method of task study to some other job.
4. In such a demonstration, notice the relation between the storage place of things used and the number and kinds of motions expended to get them out for use and to put them away. How can an understanding of motion economy affect your use of household equipment?
5. How did the analysis of Mrs. Eagan's travel chart for kitchen work make her aware of waste effort? What did she gain by seeing her kitchen set up in the laboratory? What might have been the result if the students had urged Mrs. Eagan to put her table in front of the window for the sake of efficiency? What were the additional values to the family that induced Mrs. Eagan to make the change?
6. In your opinion would Mrs. Eagan's new knowledge tend to alter her original desire to have her sink overlook the garden? Do you think this change of plan would make her feel cheated? What has she gained? What has she lost?
7. Discuss the danger of injuring a person's self-esteem and feeling of security in a group by offering suggestions for changes that the home-

maker had not thought of but that would obviously improve the situation. How otherwise might the change be effected? Have you ever had your self-esteem hurt in this way?

8. How can you get your mother to take the initiative and ask your help on needed improvements in your home? What would happen if you were to go home and tell her how to improve the home?
9. What do you believe was the value of the Eagan's long-time plan? How instrumental do you think it was in getting the improvements made?
10. Make a list of the important things that you have to do in the next year, also of those that you very much want to do but need not do. Consider the best time to do these things and jot them down on a large-size calendar. Transfer these in red pencil to the proper pages of a desk calendar with one page to a day. Now think of the important things to do for the next week, add these to your calendar pad week by week in black pencil, but watch out for your red notations so that you do not overload any one day. Next, each night jot down the important activities for the following day. By now, you will need to use an eraser and juggle your dates so as not to overload a particular day. If you manage successfully, are reasonably free from fatigue, feel good natured, and have time for fun, you will probably find that you have eliminated many things that at first seemed important, shortened others, erased, and erased again. Were the things that did not get done very important?
11. Discuss other ways to keep yourself out of a time jam and at the same time accomplish the essentials. Obtaining satisfactory results with only a mental schedule saves time and effort. If you prefer a written schedule, investigate other simple types and try them out, or, better still, make up your own. Watch out that your "time schedule" does not take too much time and that you do not become a slave to it.
12. At the end of the year consider honestly whether, in not becoming a slave to your schedule, you have omitted important things, overcrowded some periods, or made refusing to "be a slave" into an alibi. How useful was your schedule to you?
13. Discuss the application of the principles of time and motion study as a means of giving you more free time. Would this be more effective, or less, than living by a schedule?

CHAPTER 7

THE FALES HAD A LAUNDRY MANAGEMENT PROBLEM

Mrs. Fale had requested help from the home management class in planning a laundry room, although in the end it seemed to be better management not to go ahead with these plans. Succeeding groups of students have visited the Fales to hear about their way of managing.

Mrs. Fale married shortly after she graduated from the College of Home Economics; and less than a year later, she and her husband gave up their apartment in the city and bought a seven-room house in the little village of Iliad about seven miles from the city where Mr. Fale worked. Because Mrs. Fale was little older than the students still in the college, and because she still had friends there, the details of this venture were of more than ordinary interest to the home management class that worked on her laundry problem.

The place was charming. The house was a hundred years old, a small white house with flower beds in front and a vegetable garden in the back. It stood modestly in a row of newer and larger houses. The students wanted to see all of it before they settled to work in the empty laundry room. Mrs. Fale explained that they did not intend this to be their permanent home. She and Mr. Fale had bought it because they both wanted to live in a place of their own. Furthermore, as rentals were high in the city, it seemed a good investment. When they found this place, they fell in love with it. The neighborhood was pleasant, the house was fundamentally sound, and the price was reasonable. They considered everything carefully: taxes, insurance, interest, depreciation, probable upkeep and improvements on the place, and travel to and from work. They found that it would cost them less per month than to rent an equally desirable house or apartment in the city, and so they bought it. Mrs. Fale said they kept all their accounts on large sheets of paper, which gave them an easy-to-read record of their past expenditures for use in estimating future expenditures.

They did not want to make too heavy an investment in the house, but certain alterations were necessary. It had electricity and plumbing, but no furnace. First, therefore, they installed a hot-air coal furnace, the pipeless kind. Because it was an old house, it was not well insulated, and age had made cracks in the floors and around the windows where cold and dirt came in. Although they could not afford to insulate the whole house, they did insulate the dining room ceiling with wallboard. They put up storm windows, and filled the cracks between the wide floor boards in the living room to keep dust from sifting up from the cellar. They did not heat the upstairs, as they slept in a downstairs bedroom But in spite of these things the house still required an extravagant amount of coal.

As much for beauty and pleasure as for heat, they built a fireplace in the living room. As there were two outside doors into this room, one door was removed to accommodate the fireplace. They had that side of the living room paneled, and finished it themselves with wax. They painted and papered, and the house took on beauty as well as comfort.

Iliad did not have natural gas, so for the kitchen stove they investigated different types of bottled gas. They had a prejudice against the appearance of exposed gas tanks outside the house, and were delighted when they discovered a company that would sink the tank into the ground. For this they paid an installation fee of about $10. The company guaranteed to keep the tank filled, and sent them a monthly bill computed from a meter attached to the tank. As to its cost, Mrs. Fale said that the representative had not only explained that the rate decreased as gas consumption increased but assured her that this gas was more concentrated than other types of bottled gas and less should be required for the same amount of cooking.

Mrs. Fale's kitchen was well planned (Figs. 24, 25), for she, her husband, and her sister had worked hard on it. It was small, compact, and flexible, combining laundry, dining center, and planning center. Working heights were adjusted to her different tasks, and the equipment was placed at the most comfortable heights. Her utensils, supplies, and dishes were located where they were most used, and all her shelves were adjustable to permit changes as new equipment was added. She used roller shades in place of doors. They were cheap, and while the shelves became dusty more quickly, she considered this

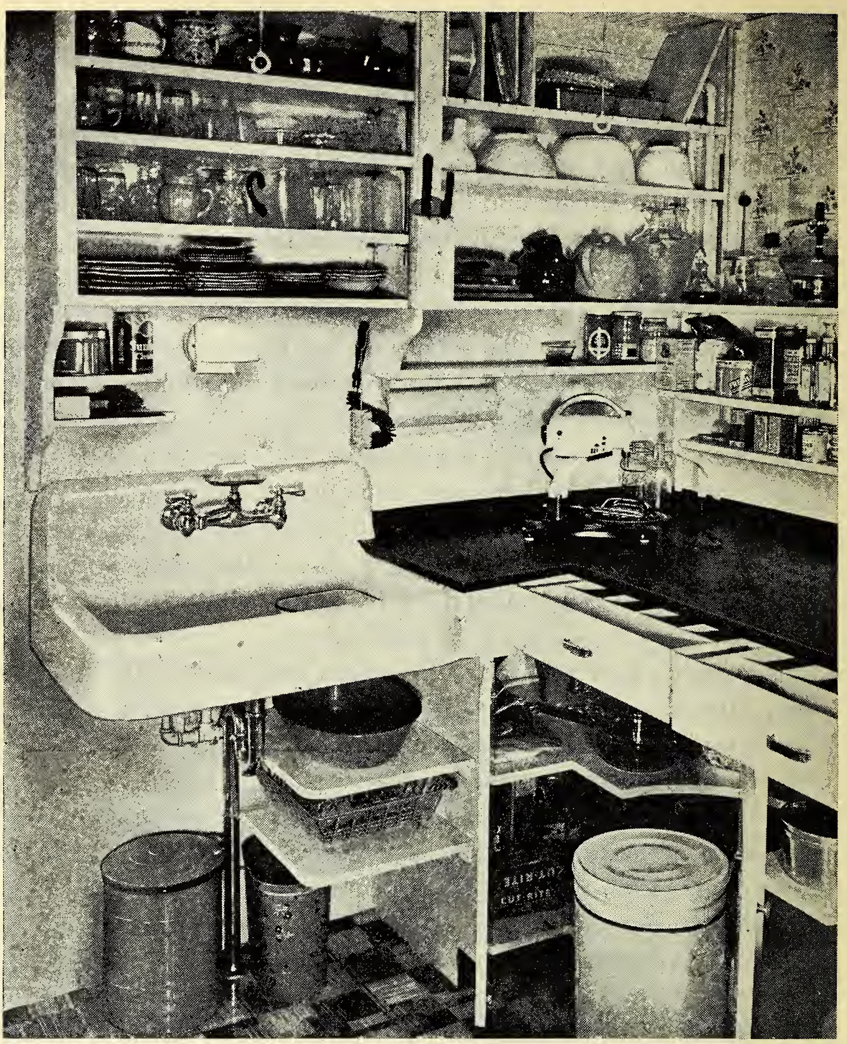


FIG. 24. This and the following photograph show a corner of Mrs. Fale's kitchen. There are no stacked mixing bowls or baking dishes nor are articles placed behind others of a different kind. Every useful inch of space is made available in the dish cupboard by the use of adjustable shelves. Below the counter, the upper shelves are cut out above the cans of flour which rest on supports attached to the doors; extra supplies are stored in the less accessible sections of this deep cupboard. Partitioned drawers prevent confusion and damage to utensils. The sink is well lighted. Small shelves beside it take dishwashing things. The bathroom door is at the left of the sink and the washing machine is opposite the mixing center, as shown on pp. 88, 89.

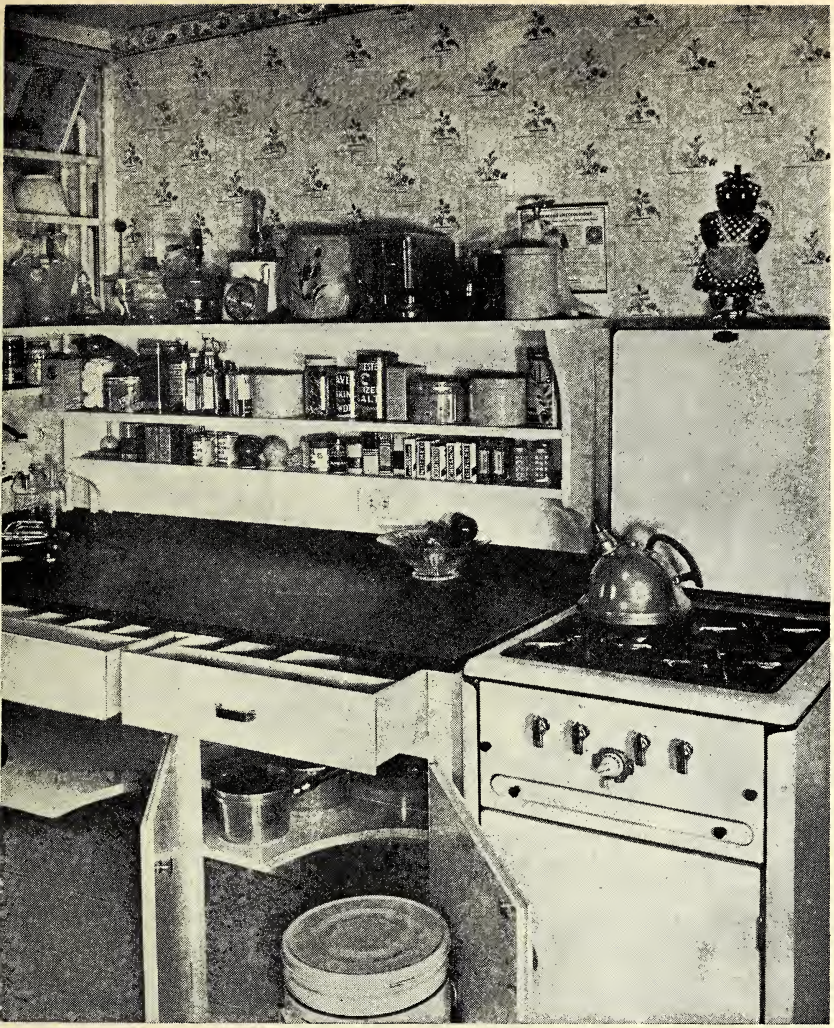


FIG. 25. The continuation of the counter, showing Mrs. Fale's stove and mixing center. Her working height and her reach were carefully checked and considered in placing the counter and the shelves. The narrowest shelf is at the bottom to save reaching over a wide shelf stacked with containers. Mrs. Fale has arranged her supplies according to frequency of use and size of container. The electric mixer is kept out and therefore used more often than it would be if it were stored in a cupboard. Mrs. Fale prefers window shades to doors, both because of the convenience and because she is apt to bump her head on doors. The shelves become dusty quicker but, arranged as they are, they can be kept clean piecemeal as the things are used.

disadvantage more than offset by the advantage of not bumping her head on open doors. As she pointed out, even closed cupboards get dusty.

They now proposed to take the laundry work from the kitchen and convert an empty room (Fig. 26) between the kitchen and dining room into a laundry. From this room there was a double opening into the dining room, and Mrs. Fale wanted to have the laundry equipment so camouflaged that this room could serve as a game room as well as an addition to the dining room when they entertained. Mr. Fale would do most of the work necessary to make the change. She was planning to buy a spinner-type washing machine because she felt it was the one best suited to her needs.

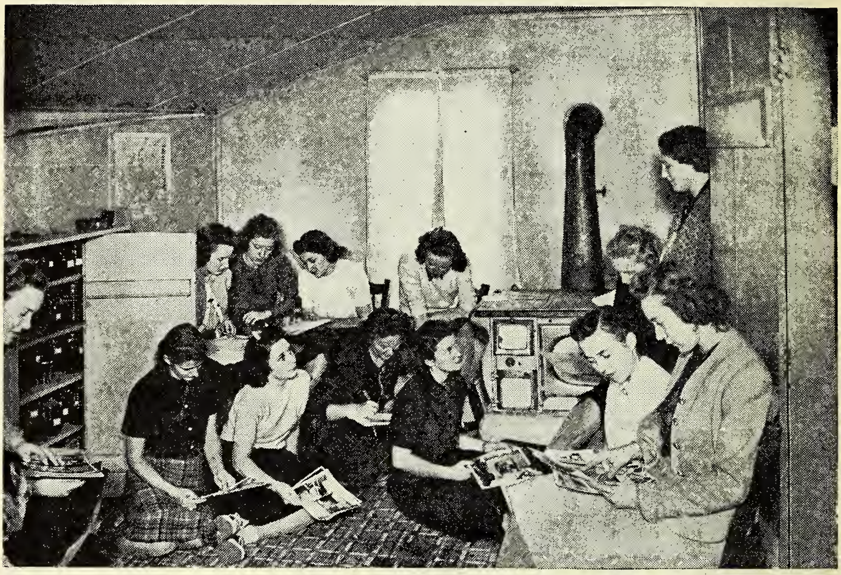


FIG. 26. Management conference in the room Mrs. Fale planned for a laundry. The dining room is opposite the window, and a double opening makes this room an extension of the dining room. The problem was to plan a camouflaged laundry in this room. The kitchen door is at the right. At the left is the door to the room where Mrs. Fale dries her clothes, and to the right of it, a cupboard for canned goods.

As an aid to the students in helping to plan the arrangement of her equipment, Mrs. Fale described her present method of washing and ironing. All kinds of questions, many not related to washing, were asked: Did she need a place to hang outdoor wraps? Where did she plan to keep her cleaning equipment? Would she keep her canned fruits and vegetables in the cupboard in this room, as at present, or in the room beyond? What kind of floor covering would she have and would it be like that in the dining room? Did they have or plan to have a pingpong table? What other games had they? After they had gained a picture of what the Fales wanted to do in this room, the class divided into small groups to work on specific phases of the plan.

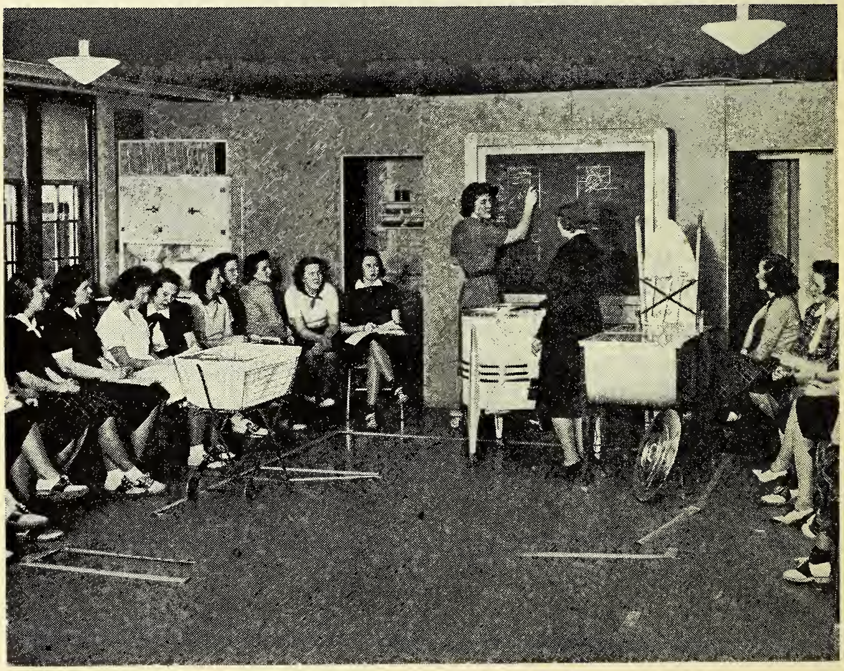
A collection of selected photographs and magazine pictures was spread out on the dining room table, and wooden models of the conveniences that might be used in this room were placed on a side table. Each group took from this illustrative material whatever was related to its particular problem. The students went into huddles to consider these ideas in relation to their own ideas and to the Fales' situation, frequently consulting Mrs. Fale for her opinion. They made sketches and took measurements. Then they combined ideas, ironed out conflicts, and referred the result to Mrs. Fale. As a further check, Mrs. Fale met with the class in the home management laboratory. She found her laundry room taped out on the floor with gummed paper tape, and there were different types of laundry equipment for experimental setups. Chairs for the class were lined up around this outlined room (Fig. 27, p. 86).

Mrs. Fale listed the approximate number and types of articles in her weekly wash, and repeated in detail the method she expected to use in doing this task. Differences of opinion arose. A student would say, "But you have to put your clothes to soak on Sunday night," and Mrs. Fale would answer, "But I don't, for I don't wash on Monday." Another would say, "You are supposed to boil your clothes," and Mrs. Fale would say, "But I don't." Each student expected Mrs. Fale to do the washing as her mother did hers. They found to their surprise that all mothers did not perform the task in the same way, and this raised the question whether any particular method could definitely be pronounced good or bad. Accordingly, they searched the class files and brought out college bulletins from other states, magazine articles, and books on home laundering. But even these authors did not all agree. So with open minds they reconsidered Mrs. Fale's method and asked, "Why do you do it this way?" to discover that her way fitted her individual circumstances.

The laundry equipment was then arranged in the room as the group had tentatively planned it at Mrs. Fale's, and Mrs. Fale went through the motions of doing the washing. The number of times she stooped and reached were counted, and her lines of travel were recorded on a scale drawing on the blackboard. As the lines and motions were analyzed, changes in the setup were suggested and the procedure was repeated. Finally, the arrangement that Mrs. Fale thought most satisfactory was tentatively decided upon. Detailed plans were worked out and presented to Mrs. Fale at a later class meeting at the laboratory. By this time the room was enclosed with canvas curtains, and doors, window, and roof slope were indicated by paper tape as shown in Fig. 28.

As finally planned, all equipment was placed on the window wall; the tubs were in the center, with the washing machine on the left and a

FIG. 27. At the home management laboratory the proposed laundry room was taped out to scale on the floor. Mrs. Fale demonstrated her method of washing, and a student marked her lines of travel on a floor plan drawn on the blackboard. She and the students studied these lines and tried different arrangements of equipment to reduce travel, until they found the arrangement that seemed best for Mrs. Fale.



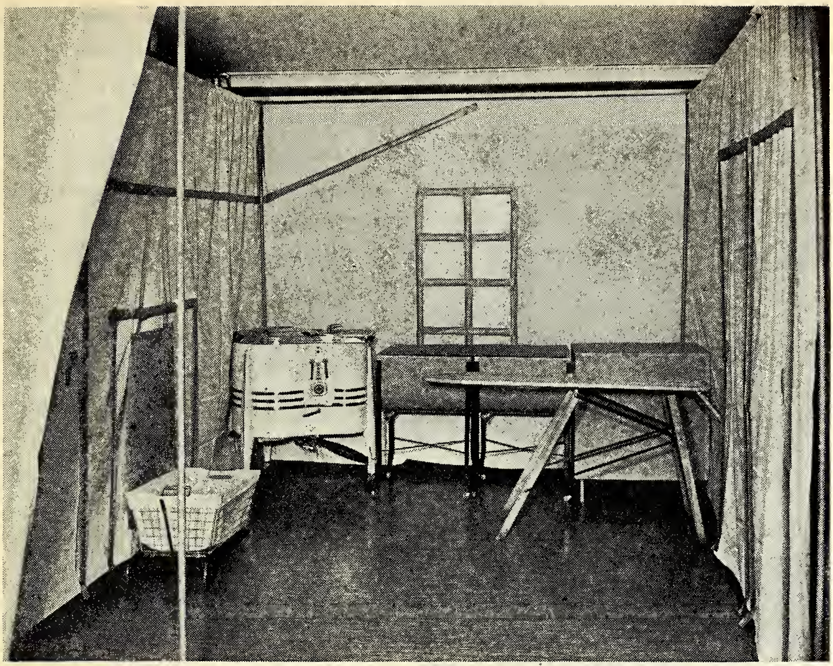


FIG. 28. The final plan for Mrs. Fale's laundry. The room is set up to scale in the laboratory, with canvas walls suspended on a gaspipe frame; doors and windows are marked out by strips of paper pinned onto the canvas. The whole unit is designed to give the effect of one long built-in cupboard. It would be built in three units: to conceal the machine, a plywood cover, open at the back and equipped with casters, pulls out and serves as a sorting table; to conceal the tubs, either a similar cover or a more permanent cupboard with doors and a removable board top; to store clothes basket and washing supplies, a built-in cupboard at the right. The door at the left is to a cupboard for fruit storage and extra washing supplies. The ironing board is stored in the cellarway, which is one of the two doors indicated in tape at the right.

cupboard on the right. These were to be covered by three wood units. One, similar to that in Fig. 134 (p. 221), would cover the machine and could be pulled out and used as a sorting table. The middle unit over the tubs could be either removable — like that over the washing machine — or could be built in; if built in, it should have a means of ventilation, a removable top, and doors that open to give knee and toe room as well as access to the plumbing. The cupboard at the right would be built in and furnished with doors; the clothes basket would be stored in the lower part and washing supplies and flower vases kept in the upper part. If doors were simulated on the washing machine cover and the whole painted like the woodwork, the effect would be of a long, closed cupboard, a place to be made decorative with pottery and plants and yet found useful for buffet suppers.

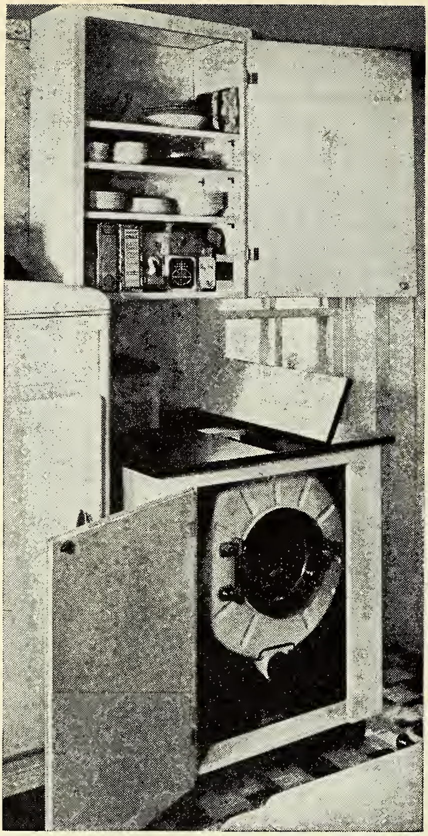


FIG. 29. Mrs. Fale's present laundry center. On the homemade cabinet can be placed foods for the refrigerator, the door of which opens conveniently for the purpose.

However, later in the year the Fales made drastic changes in their plans. There was to be a baby. Mrs. Fale realized that this would increase the frequency of her washings. She saw the demonstration of an automatic washing machine that she believed would have many advantages in her situation, and she had this machine installed in the kitchen (Figs. 29, 30). This arrangement cost considerably less than to equip the laundry room; it eliminated the cost of tubs, and it reduced the cost of plumbing because in the kitchen the machine was near the source of water supply. Furthermore, there was no danger here of pipes freezing as there would have been in the proposed laundry room, which had no cellar. With the machine in the kitchen she could wash daily if need be, while doing her kitchen work. She had merely to fill the machine, put in the clothes and the cleansing agent, close the machine, set the timer, and turn the switch; the machine would automatically wash, rinse, and spin the clothes ready for drying. She chose the less expensive, non-cabinet type of machine. Her husband fitted it with a wooden cabinet that served as a convenient work surface beside the refrigerator. Since the door from the kitchen to the bathroom was next to the machine, all sorting of clothes could be done in the bathroom.

SUGGESTIONS FOR DISCUSSION AND INVESTIGATION

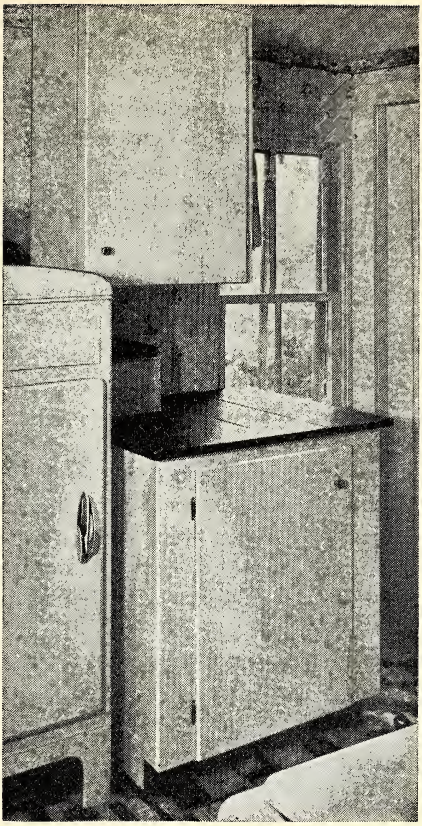


FIG. 30. Mrs. Fale's washing machine closed. Note the toe room at the base. The bathroom is at the right of the washer, so that soiled clothes can be sorted there.

1. Many rural homemakers consider laundering to be the most tiring household task. Look up both professional and commercial printed material on home laundering. Compare the different methods advocated for performing this task. Consider the method used in your home and the resources available for it. How does your home method compare with those advocated? How is it that good management can be achieved although the methods may differ? What factual material did you find in your reading that might help you improve your home method? What advocated methods would not be practical in your home? Evaluate the material read; count the "shoulds" and discuss their validity. Send for copies of any material on laundering that you think would be valuable for your files.
2. Make a study of the different types of washing machines, irons, and ironers that are on the market. Try to use, or see demonstrated, as many of these as possible. What features do you like and what do you dislike? Give reasons.
3. What motions and body postures are used in washing? in ironing? Demonstrate. What motions and positions are most tiring for you? Demonstrate whether a change in posture affects this task adversely or improves it. What portions of the task could you do sitting and find less tiresome? How could the equipment or its arrangement be changed to cut down fatigue? Study some other household task by the method used here for the study of home laundering.
4. Read pages 275–284 and compare the advantages and disadvantages of the canvas curtains used in Mrs. Fale's project with the wall panels used in Mrs. Eagan's. Have you any suggestions for the improvement of either? With what adaptations is the idea practical for your school from

the point of view of (1) room for setting up, (2) room for storage when not in use, (3) expense, (4) time for making, (5) educational value, (6) priorities.

5. Find out the cost and the different methods of putting adjustable shelving into cupboards and closets already built.
6. Visit department stores and showrooms of lumber companies and of companies selling kitchen equipment where kitchen cupboards are on display. Study college bulletins, magazine articles, and advertisements. How often do you see adjustable shelves? How are they made adjustable? What other ways can you think of for making shelves adjustable without using priority materials? If shelves cannot be made adjustable, how else can flexibility be achieved? See pp. 280 f.
7. What are the relative advantages and disadvantages of roller shades and cupboard doors? Can you suggest ideas for future inventions that might offer the utility of roller shades without the disadvantages?
8. Where do people get their ideas of what is beautiful? Discuss.
9. Discuss some of the factors that might be at the bottom of the psychological reaction some women have against open cupboards. Give examples from your own experience to indicate that Mrs. A can manage well with cupboard doors, while Mrs. B can manage equally well without them.
10. Point out some of the recent changes in designs of kitchen utensils and dishes, and explain how these have affected the attitude of some women towards open cupboards.

CHAPTER 8

THE GREYS MANAGE AND WORK FULL TIME

The Greys had purchased an old colonial home in the village of Alden about ten miles from X, where the state college was located. The kitchen was badly in need of remodeling, and Mrs. Grey asked the home management class to help her with this project. A summer school class worked all summer on the kitchen and wrote a report of their experiences for future class reference. In succeeding years, visiting classes have always found something new accomplished.

On a cold afternoon in October a chartered bus with twenty-seven students drew up to the entrance of an old colonial house in the village of Alden. The house spread long and low, fluted white columns supported the roof, and under the eaves old iron grills ornamented the shallow "lie-on-your-stomach" windows of the bedrooms in this story-and-a-half house. The house fronted the village green. At its back lay the garden, and beyond that stretched pasture land and a dark line of low woods.

From a deep indented porch the entrance opened into the side of a long living room, and it was immediately evident why the Greys had chosen to buy this house which was ten miles from their work. It was a solid house, built in the old way around central chimneys. At the right of the front door was one of those large fireplaces built into old homes. It was now glowing with a log fire (Fig. 31). The room appeared as a double room joined by a wide archway with sliding doors. The windows were large, their woodwork delicately scrolled. The library opened out from one side, and on the other was the bedroom and bath used by the Greys. Behind the fireplace, and entered from either side of it, was the dining room (Figs. 32, 33), with a steep stairway mounting along the back of the chimney and opening for a few steps into the dining room. Beyond this room was the kitchen.

The Greys are among those people who help preserve the fast disappearing traces of the early settlers in the region. Obviously, it was

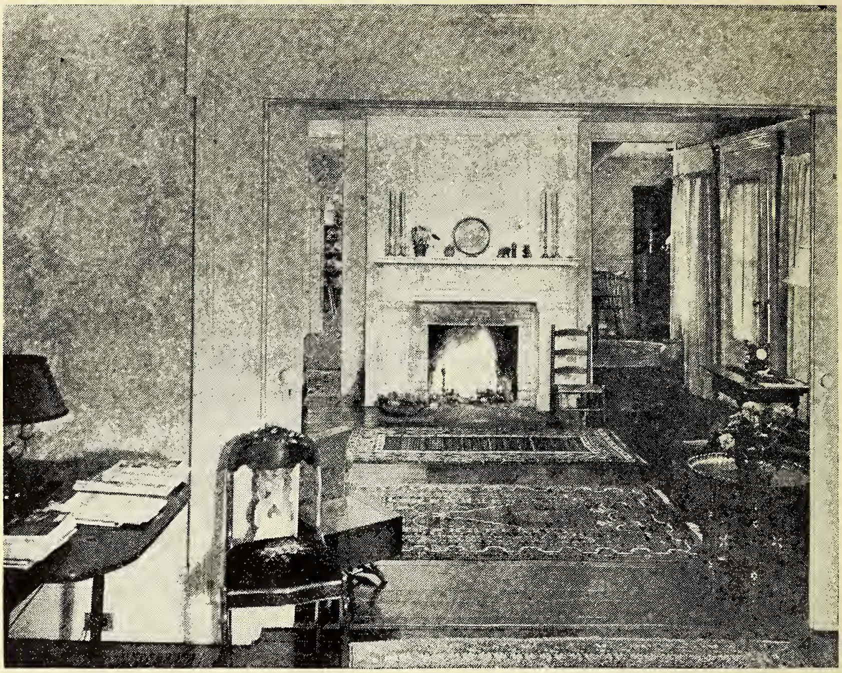


FIG. 31. From where the camera stands between the high windows of the front living room, the eye follows through the archway into the central living room, passes to the left of the fireplace across a small rug that lies at the foot of a half-open stairway built against the chimney, crosses the dining room, and catches the inviting glimpse of bright pottery in the new kitchen shown in Fig. 32. At the right of the fireplace is the front door opening onto a recessed porch framed by the dining room beyond and the library at the right of the living rooms. A bedroom and bath on the left balance the library. At the right of the fireplace is a second door to the dining room.

the antiquity of the place that had charmed them, the feeling that it had been much lived in. It was the birthplace of a woman important in local history, and President Cleveland had once been a guest here. Mrs. Grey said that often old persons dropped in and revealed that they had been married in the house or had once lived there. In these rooms old maple, pine, cherry, and mahogany pieces fitted with a real sense of belonging. Many of these had been in the families of the Greys for generations, others they had bought at roadside auctions and farmhouses and refinished themselves. "None of it matches, of course, but we think they fit." It did in fact demonstrate how completely and naturally pieces of different wood, aged by time, blend together.

To the girls gathered about the fire Mr. Grey explained how they came to get the house. He and Mrs. Grey worked in the city of X, ten miles away. Through the nine years they had worked there, they had lived in rented apartments. Their last home had been a three-room apartment for which they paid $55 a month. But both he and Mrs. Grey had been brought up in homes owned by their families, and neither of them liked the restrictions of apartment life. They wanted their own home. They wanted room to entertain and to enjoy their hobbies — photography, sewing, gardening, and woodworking. They wanted a house easy to live in, to entertain in, and to care for. They wanted a garden. They hoped, if this ideal place were found, it would be in a small town. Nine years of apartment life had made them sure of what they wanted. And so they had at last decided to "step on the starter."

They drew up the plan of a house that they felt would meet their needs and presented it to an architect. It would cost $15,000. Too much. They pared until they came out with a three-room house at $9,000. Again too much, and not what they really wanted either. They looked at houses in the city, but again they were too expensive. They let their wants be known. Finally, an antique dealer of their acquaintance told them of this century-old house of Greek Revival architecture that was for sale in Alden. They went to see it and exclaimed: "It is ours!" It was a moot question, they said, whether it was the fine old house or the fine old barn that had forced this instant decision.

Certain things had to be looked into, however, before the place became theirs. They took a friend who was both architect and contractor to look at it, and he pronounced it structurally and architecturally sound. Certain repairs were needed; the roof was beginning to leak and the outside paint to peel, and a new heating system should be installed. But the former owners had done wonders in restoring the main rooms of the house. The cream paint was fresh, and the wallpapers were new and in the happiest taste. The Greys wished to have the wide-board pine floors, still coated with old dark paint, restored to their natural pine glow (though after they had "broken their backs" restoring the library floor, they decided that they, too, "liked" the dark painted floors). The kitchen stood in most need of change because the former owners had not carried out their plans for its improvement. It was small, dark, and inconvenient; it seemed to cry out for some kind of grand gesture of improvement, and the Greys longed to respond.

The cost of the house was $5,000 in cash. They found that a building and loan association would let them have the money on an amortized loan plan whereby the interest and a percentage of the principal could be paid each month. To this they added taxes, insurance, telephone, approximate cost of heating, lighting, and upkeep and found that all of these would equal almost exactly their present rent. While the upkeep would be high, the cost of living in Alden was considerably lower than in the city. The insurance would be low because of a fire hydrant in front of the house.

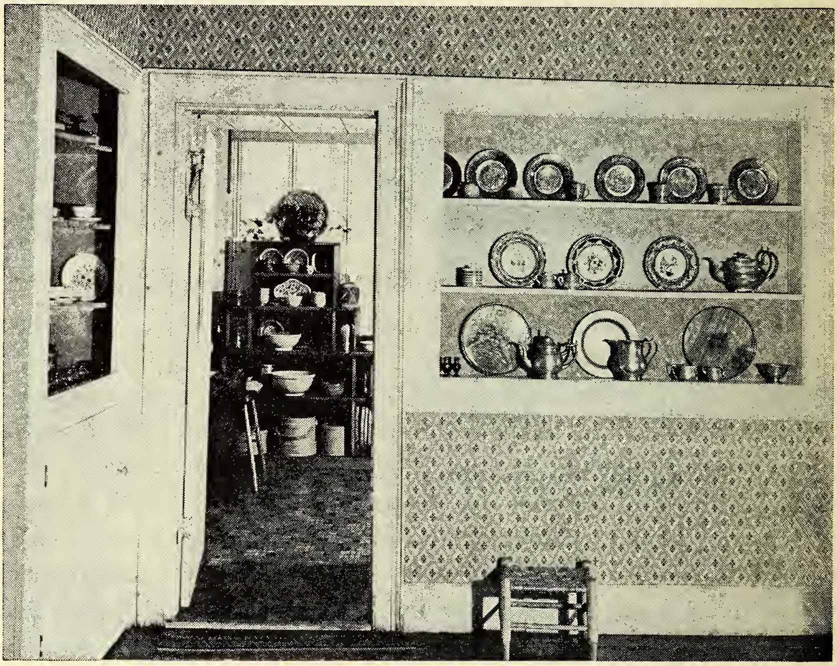


FIG. 32. This view into the present kitchen can be seen from the farthest reaches of the living room. It is a tapestry of bright color with copper, pewter, and pottery pieces, some of them merely decorative, arranged on shelves assembled from an old bookcase. This picture and Fig. 33 were taken from a position on the small hooked rug at the foot of the stairs, at the left beyond the fireplace in Fig. 31.

They considered all these things. During their nine years of renting they had paid out $6,000. For this they had had a home, and the many conveniences and advantages of living near their work and of not being tied down. But if they bought the house, all they put into it would remain theirs in the end. It seemed a worthwhile investment. However, transportation was a problem. They studied their records and found that their car expenses in the city had averaged from $8 to $10 a month, not including about $6 a month for garage rent. By living in Alden, ten miles from the city, their car expenses would be approximately $10 to $15 a month, but they would have their own garage. Thus these costs about balanced. "And so," said Mr. Grey, "with our eyes open, we bought the place."

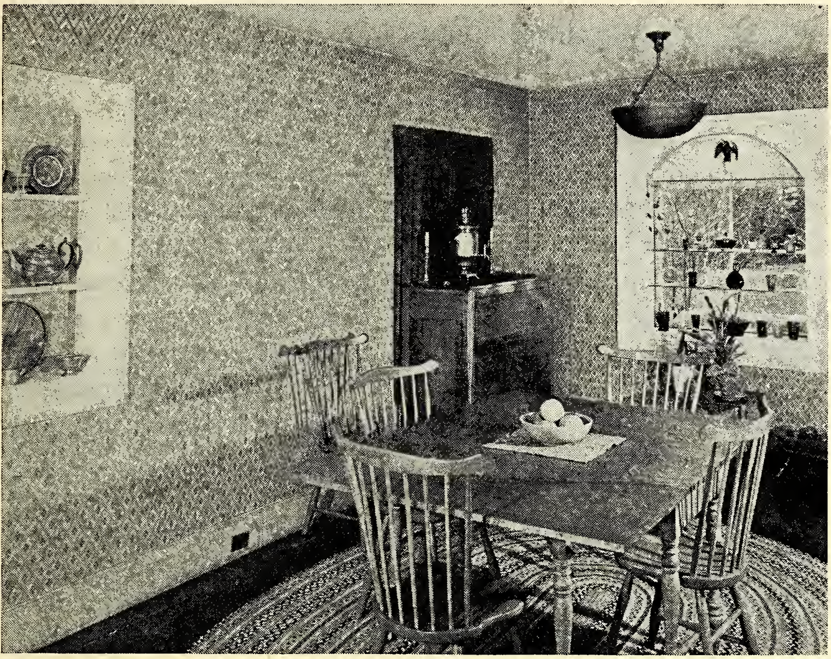


FIG. 33. The dining room extends the width of the house. Along the right wall and partially open is a narrow, ancient staircase to the bedrooms. The paisley shawl conceals the former doorway to the hobby room. Copper tones of shawl and samovar repeat the copper print in the wallpaper, and the utilitarian purpose of the shawl is not apparent. Light is reflected to the ceiling from tinfoil-lined chopping bowls.

The first and biggest problem was the inadequate furnace. When they bought the house the kitchen was heated only by the cookstove, nor could the old furnace adequately heat the rest of the house, which was seventy feet long and contained eleven rooms. Before making so important an investment, Mr. Grey investigated all types of heating systems suitable for the house. He consulted dealers in X and in other near-by towns; he talked with friends who had recent experience with different types of heating systems; he talked with an engineer of his acquaintance; and he studied mail-order catalogs. As between hot air, hot water, and steam the choice was simple, since both he and Mrs. Grey disliked the appearance of radiators. Without debate, therefore, they chose a hot-air furnace. And since they would both be away all day, an automatic control was indispensable. There was then the question of whether to use oil or coal. The oil furnace would cost $1,200; but it would be the better choice for them because it would be completely automatic, there would be no labor connected with it, and it would be clean. They could get a good coal furnace without a stoker for about $500 and with a stoker for $800. In addition to saving on the initial cost, they estimated that heating with coal would be cheaper than heating with oil. They came to a decision: a coal furnace with a blower, but for the present Mr. Grey would be stoker. They asked for bids on the furnace and the installation. Mr. Grey felt this had saved money as against buying in the open market.

Two years later they bought a stoker. As they knew nothing about stokers, they interviewed engineers who were authorities on stokers and talked with friends who had bought stokers. One type, for fine hard coal, was practically human; it would put coal on the fire, take out the ashes, and dump them in the ashcan. But it was expensive. The soft-coal type was cheaper, but you shoveled your own ashes. Unfortunately, also, soft coal tends to form clinkers that have to be removed with profanity and a long pair of tongs; and soft coal is dirty. Mrs. Grey didn't like the idea of soft-coal soot. However, a friend told Mr. Grey that he had the soft-coal type and that it was wonderfully satisfactory (his wife told Mrs. Grey that he just wouldn't admit it wasn't); besides, the agent for it was a genial fellow, and assured the Greys that it would burn hard or soft coal equally well. In the end, they bought the soft-coal stoker because its price was substantially less.

But soon Mr. Grey began to wonder: was it cheaper just because it cost less at first? He found that instead of being solved, his furnace troubles had just begun. The stoker was never properly adjusted.

The man who installed it left town and the manufacturer would not assume responsibility. Not all soft coal is the same, and the kind available to Mr. Grey did not work well. With the heat turned low during the day, a crust would form on top that had to be broken up. There were, indeed, clinkers; and there was soot. Mr. Grey struggled harder with the furnace than he had before. However, they brought home sacks of different kinds of coal and experimented until they found an acceptable if not perfect mixture of hard and soft coal. Mr. Grey continued to experiment, and at last, after two years, he reports that it works like a charm. "A stoker," he says, "is a very sensitive thing. It is at least half human."

The next big job was the kitchen. It was a fairly small room, 9½ by 13½ feet, and much of the wall space was taken up by four doors (Fig. 34). One opened into a square 9½-foot buttery, one into their "hobby" room, one into the dining room, and one onto the back porch. The last two were so close together that when they were both open the door handles had a depraved tendency to interlock. The rest of the room was pretty well filled up by a large coal range and a water tank that were both pushed out into the room by a projecting chimney. An oil burner had at some time been installed in the stove firebox, and while they had plenty of hot water and could cook satisfactorily on top of the stove, the oven would not heat. The cupboards were inadequate — no drawer space, no place for cooking utensils or cleaning equipment — and the doors of the supply cupboards were always bumping into each other and into Mrs. Grey. The sink was large but had only one small drainboard. There was no place for the refrigerator except in front of the only window, where it blocked what light struggled in under the projecting roof of the back

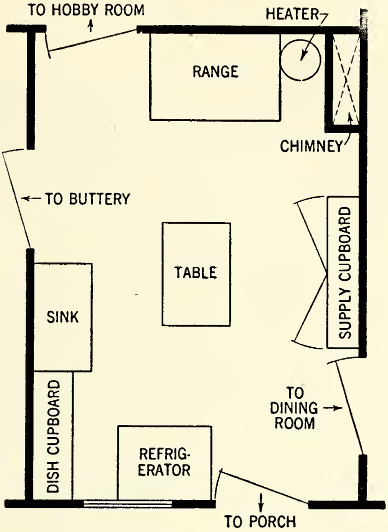


FIG. 34. The original kitchen was 9½ by 13½ feet. Four doors took up all extra wall space; the refrigerator blocked the light from the only window.

porch. While a table was necessary to provide a working surface, there was no room for it. As Mrs. Grey said: "It floated." But wherever it came to rest, its sharp edges reached out and sideswiped Mrs. Grey in her brisk trips around it.

Mrs. Grey explained that since they were at home only from five in the evening to eight in the morning, it was important to have the kitchen arranged so that she could prepare breakfast and dinner easily and quickly. Yet they wanted it to be attractive and to fit into the atmosphere of the rest of the house. In fact, there were so many possibilities and so much to be done for what they could afford, that Mrs. Grey decided to go out shopping for ideas. She visited kitchens, looked at pictures of kitchens, read up about kitchens, drew plans of kitchens, and finally asked the home management class at the college to come out for a consultation.

The students had become enthusiastic about the project, and ten of them had worked on it through the six weeks of summer school. They divided into groups and worked on the problems presented by the stove, the sink, the shelves, the lack of counter space and cupboards, and the lack of space for food preparation; in other words, on the whole state of awkward congestion. They helped Mrs. Grey determine the most comfortable working heights, and the best heights and widths for cupboard shelves. A carpenter built the framework of the cupboards according to the plans. Metal stripping made it possible to adjust the shelves, and some shelves were narrower than others to accommodate smaller dishes. A modern gas stove, smaller than the old range, was fitted in close against the wall, and the hot-water tank was put in the basement. The old supply cupboard with its awkward doors was replaced by a flat work surface into which the old sink was set so as to leave counter space at both ends (Fig. 38). Cupboards were built above and below the work surfaces, the ones on the left concealing the old chimney. Additional floor space was achieved by recessing the refrigerator into the buttery (Fig. 39), leaving the window overlooking the garden free for the breakfast table.

At the request of the students, a college extension specialist in household art came out with the group to study color schemes for the kitchen. They brought out color-cards of paint, pieces of fabrics, and colored prints of old Swedish kitchens gay with color. At once the Greys seized on the ideas these Swedish kitchens suggested, and visualized a kitchen that should be none of your cold white affairs, but a room vivid and alive. Mrs. Grey had many pieces of pottery, and these should be given a conspicuous place and made the chief decorative note. They found that a warm gray tint went well with the old pine cupboards, and that a turquoise or tile-blue inside the cupboards brought out the varied colors in the pottery. A certain shade of terra cotta in curtains gave the kitchen a great deal of life.

But all this improvement, Mr. Grey said, only stimulated their thirst for more improvement. One evening, while eating supper, it came to them all in a flash that the room really was too small, it was dark because the back porch shaded the window, and it was poorly ventilated. In short order their active minds performed a major operation on the room. Out should come the partition between the kitchen and — which other room? Should it be the hobby room at the end (Fig. 34), the haven for Mr. Grey's photography and Mrs. Grey's sewing? Or should they give up the little buttery (Fig. 35), so quaint and so convenient? With all the little pine drawers in it, it might have been a postoffice. Of course it was suitable for a laundry, but they sent out their washing. It was a peerless "catch-all" just as it was, and Mrs. Grey wanted a catch-all, being, as she said, "that kind of person." Either room would have to be insulated. The buttery, glassed-in around the corner, would make an ideal dining spot overlooking the garden; the hobby room, on the other hand, would have the morning sun. Each choice brought some loss, each brought some gain.

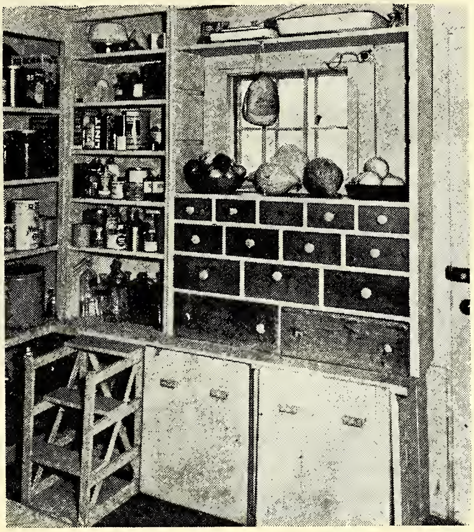


FIG. 35. The Greys' cold buttery and catch-all. The refrigerator, recessed from the kitchen, projects into the room at the left. See Fig. 39.

The students must all come and see which had been chosen. They would take turns, Mr. Grey would take half the students to the kitchen

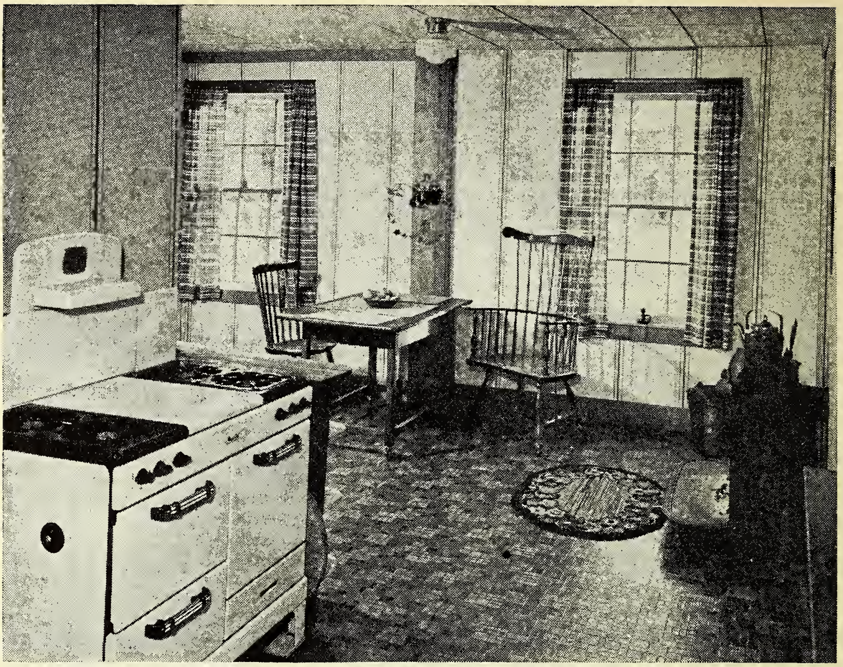


FIG. 36. Looking across the old kitchen into what was the hobby room. The old partition extended from just beyond the gas stove to the sink on the right wall (Fig. 38). The windows overlook the village green and let in the morning sun; the Franklin stove insures a warm breakfast spot and a pleasant workroom. Dress form and photographic equipment are kept in a deep closet at the left end of the alcove.

while Mrs. Grey showed the other half over the house. "And you'll be lucky," said Mrs. Grey, "if you don't have to go to the barn and see his workshop and power saw. He made the kitchen cupboard doors and drawers himself."

With a picture indelibly in mind of a small crowded kitchen, its single window shaded by a porch and half blocked by a refrigerator, the new kitchen seemed to the students an astonishing transformation. The hobby room had gone, and one could almost say that the kitchen was gone also, for the "kitchen" effect had almost wholly disappeared. As the kitchen door is opened (Fig. 32) the eye is caught by an irregular cupboard (adapted from an old bookcase) bright with colored dishes and decorative containers. This view of the kitchen can be seen from the farthest part of the living room, and its bright colors beckon with an intriguing invitation borne out by the rest of the kitchen. The

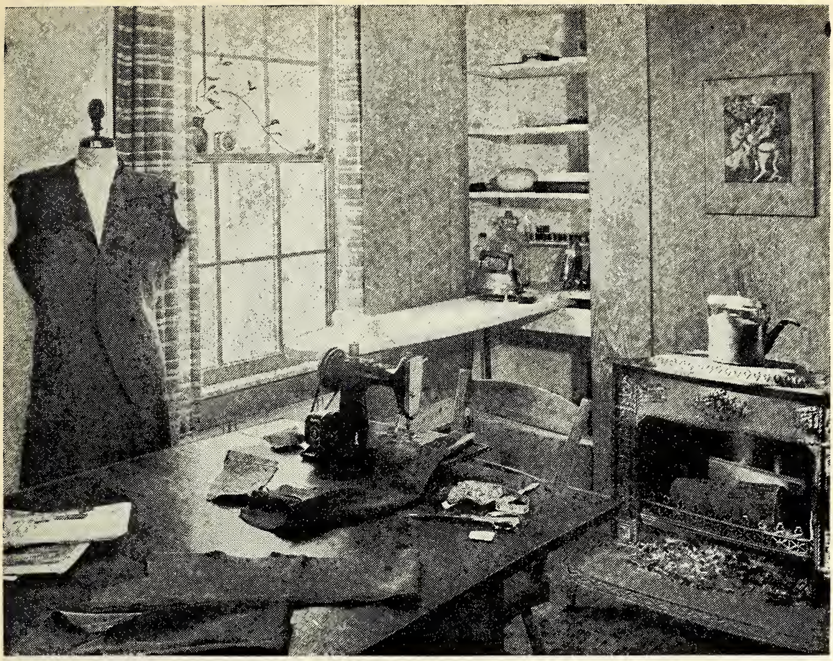


FIG. 37. Paneling was put forward a foot from the old wall to make it continuous with the sink cupboards. This left room for two closets. The one shown holds small sewing equipment. The ironing board folds up against the shelves; a closet at the end of the dining alcove (Fig. 36) takes the dress form. Behind the Franklin stove was the door concealed by the shawl in Fig. 33. The breakfast table is now a cutting table.

partition between the hobby room and the old kitchen had been taken out, and the gas stove moved opposite the sink (Fig. 36). Insulating the walls and buying the linoleum were the main expenses, as Mr. Grey did much of the woodwork himself.

At the left of the sink (Figs. 37, 38) the wall was brought forward with cedar paneling, so that the old chimney was wholly concealed. The space between the new and old walls had been converted into cupboards. One of these (Fig. 37) had been made by Mrs. Grey into a sewing closet. Here she keeps her electric sewing machine, patterns and pieces, pressing pads and irons; the ironing board folds up against the shelves. The dress form is kept in a deep closet at the left end of the dining alcove (beyond the left window in Fig. 36); there also Mr. Grey keeps his photographic equipment and does his developing.

Thus the transformed room now serves as the pleasantest kind of

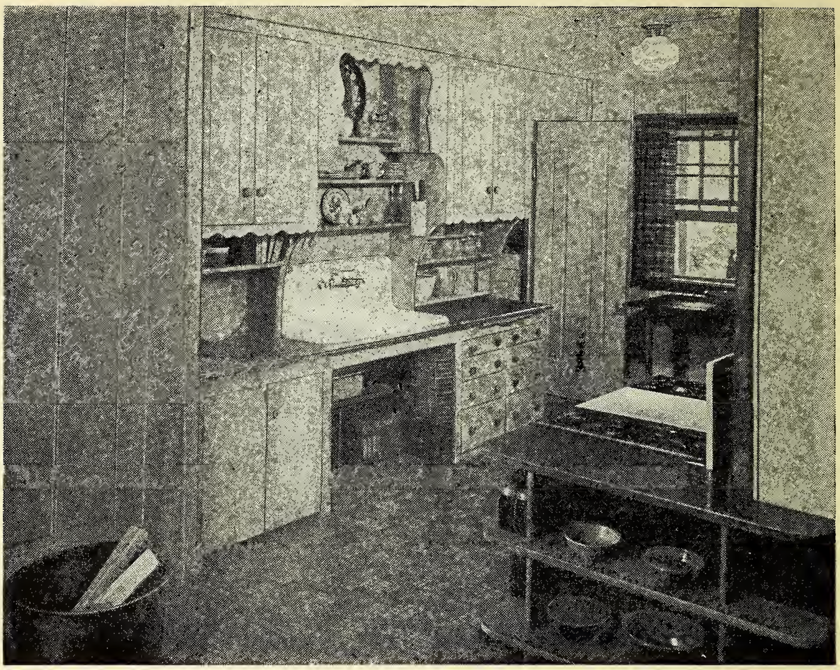


FIG. 38. The door to the dining room is open at the right of the sink. The porch door that bumped into the dining room door has been replaced by the window. Observe how Mr. Grey's decorative woodwork and Mrs. Grey's bright pottery made the sink inconspicuous, and how the small shelves conceal the gas stove from the dining end of the kitchen. The Franklin stove is against the sink wall at the left.

breakfast and work room. A Franklin stove, against the chimney wall, makes it possible for the Greys to have a cheerful fire no matter how hurried their winter breakfasts. A set of small shelves (Fig. 38) conceals so successfully the end of the gas stove, the cupboards around the sink are so decorative, that diners can forget they are "in" the kitchen. No other evidences of a kitchen are apparent. Even the front of the recessed refrigerator (Fig. 39) is hardly distinguishable from the cream-gray wallboard. The linoleum, curtains, and the interiors of the lower cupboards reflect the copper tones of the dining room.

Each succeeding class that has visited the Greys has found some new improvement planned, begun, or finished. Mrs. Grey explained that they had never ruined their health and dispositions trying to finish or furnish their house in a hurry. They liked working on their house themselves, and they knew themselves well enough to realize it would never be wholly "done." They loved antiques and enjoyed going to auctions and refinishing the pieces they picked up. They liked doing outdoor things together, hiking, skiing, gardening. They wanted to work on the house only so long as it was fun. When outdoor work called them, they did not permit a half-finished job in the house to weigh on their consciences. "We have suited the house to our activities. We love it in its incomplete condition and we have never forced ourselves to finish it. We get as much fun from the process as from the results."

"And speaking of the process . . ." And Mrs. Grey told how she tried to paint the bathroom ceiling. She had set a stepladder in the bathtub, and with a pail of paint in one hand and a brush in the other started to ascend. She had just suggested to her husband that he do a certain job in the garden and finished by saying, "Maybe you had

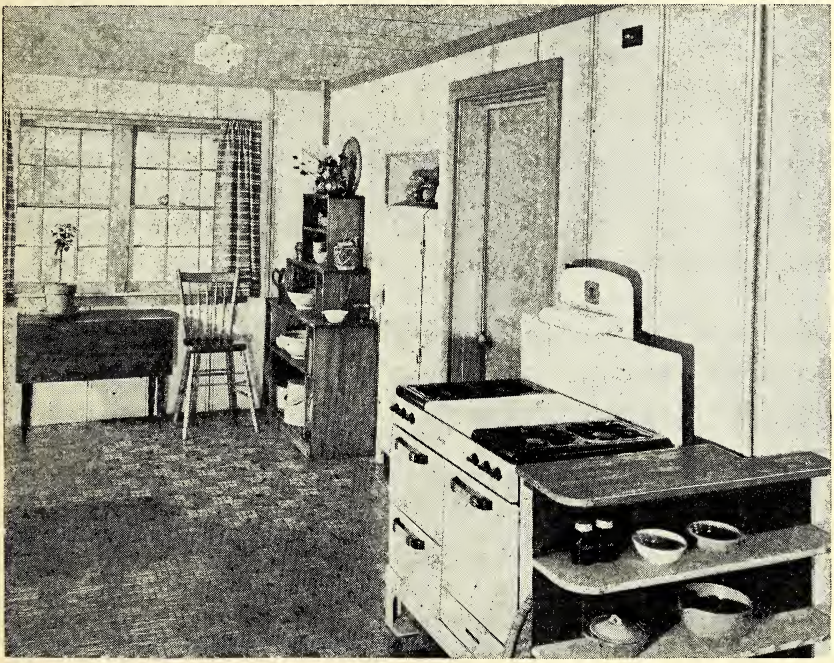


FIG. 39. This section containing the gas stove and the sink (on the left wall) was the original kitchen on which the home management class worked; none of the original changes had to be destroyed in enlarging the room. The single window has been replaced by a double one overlooking the garden. The door at the right leads to the cold buttery; the recessed refrigerator appears to be a part of the wall.

better stay around in case I fall," when — crash! Mrs. Grey, paint, and ladder were a tangled and paint-drenched mess in the bottom of the tub. Hours later, cleaned up, inspected, and bandaged by the doctor, they were able to laugh about it. The next week they entertained; she lay in state on the living room couch and the company ate from trays. But Mrs. Grey still limps, and perhaps always will a little. "I knew I was taking a chance, but I thought I would get by. Let it be a lesson to you — but don't let it stop you from doing your own fixing and painting, because it is fun."

Mrs. Grey said that when first married she kept detailed household accounts but stopped after five or six years because she never had time to analyze these records and felt that account-keeping on this scale was a waste of time. "I keep no account of food bills because I know how to buy." She felt, however, that there was a great deal of point in keeping records of certain other expenditures. For example, she has kept a record of everything spent on the house since they bought it. Should they want to sell, this would be a guide to what they could ask. They are also keeping track of their coal bills. Over a period of years and in relation to different cars, they had kept accurate account of their summer trips, mileage, cost per mile of gasoline and oil, and food bills while traveling. In this way they had been able to estimate fairly well the cost of any trip they had wished to take, and their friends also had found these facts valuable.

One wonders what the Greys will do next, whether they will ever come to the point when one improvement will not lead to a new and better idea. One hopes they will never stop doing something new, they enjoy it all so much.

COMMENTS OF STUDENTS AFTER VISITING THE GREYS

The Greys' manner of dealing with the problem of making livable an old attractive house seems unique. So many people become slaves to an old house by letting the house rule them in its old-fashioned way or by being dominated by the desire to modernize it all in one "fell swoop."

The Greys are taking their time about fixing up the house and are getting pleasure rather than making work out of the process. In the meantime, they do not worry if everything is not in perfect order or if something looks worn. Instead, they enjoy living in the house and sharing it with friends. They spend time in the garden, Mr. Grey works in his shop, they take trips, and see real value in enjoying the good things of life.

The Greys are renovating and repairing as they feel the urge and the need. There is none of the anxious bustle and hustle of flying paint and pounding nails that sends most new homemakers to despair before the house is completed.

Probably there will never come a time when everything has been done. After all, the Greys are having their fun in the doing. In their case, as in all homes, management is a process with new problems coming up from day to day.

Their management is successful rather than efficient, they manage so that they can enjoy living.

It was one of the most delightful homes I've ever been in and a most valuable trip. It rather pulls management as an abstract thing out of the air down to the earth as something very concrete and real.

It is very evident that they have enjoyed making a charming and livable home; probably they want to make the doing last as long as possible.

SUGGESTIONS FOR DISCUSSION AND INVESTIGATION

1. Do you believe that the saving of time, money, and energy is always good management? What determines whether it is or not? Give an example from the Greys, where efficiency would not apparently have been good management; where it seemed to be good management. Give similar examples from your own experience.
2. Does it appear to you that Mr. Grey's work on the home with tools was a wise investment? What did it save? What did it cost? With some ability to use tools, what could you do to make work in your home easier?
3. Discuss the pros and cons of accident insurance. Find out the latest figures on the cost, in money and human life, of home accidents in this country. Investigate the different organizations — national, state, county, and city — that are working towards greater safety in the home. What illustrative material is available for teaching home safety? Tell of accidents in your home that have been due to carelessness, taking chances, ignorance, inadequate protection. Discuss your own household equipment in terms of safety.
4. Discuss the Greys' philosophy with regard to fixing over the house.
5. If you know families who operate on two salaries, how do their values, and their ways of achieving them, differ from or coincide with the Greys'? What evidences of their good management can you cite?
6. With your family in mind, discuss your reactions to (1) a kitchen to be combined with dining or living facilities; (2) a large, convenient kitchen *vs.* a compact kitchen; (3) a streamlined kitchen with built-in equipment.

7. Look up information on refinishing furniture. Discuss antique furniture from these points of view: (1) relative cost, refinished, to new furniture, (2) comfort, (3) beauty, (4) depreciation, (5) household insurance cost, (6) upkeep, (7) stability.
8. Discuss the different ways of keeping financial records used by the families described in this book. Consider these in relation to their individual purposes. Compare with your own methods. Discuss accounts and budgets in terms of means to an end. Explain how one family may manage well without keeping accounts and budgets while another family finds them necessary for good management.

CHAPTER 9

HOME MANAGEMENT IN HIGH SCHOOL

It is sometimes possible for a high school homemaking class to bring problems from homes to the school for solution, just as the class assisted Sara Louise Richards in planning her kitchen. Also, students can use their laboratories as workshops to try out ideas for making their school work more natural. It is possible, too, for homemaking classes to set up in the school laboratory homelike situations the principles of which they can carry over into the improvement of their own homes. Kate Allen offered such a practical problem to her class when she encouraged them to plan and equip a homelike kitchen in an unused end of an unhomelike foods laboratory. This close tie-up between home and school makes the teaching of home management real and vital.

FROM HOME TO HIGH SCHOOL

A hesitant voice from the doorway: "I wonder if you would like to come over and see our apartment, especially the kitchen." The home management instructor looked up to see Sara Louise Richards, a former student who had taught homemaking in high school after graduation. She was now married, but had continued with her teaching. Sara Louise continued: "We rented a basement apartment that was dark, gloomy, and inconvenient but had possibilities. I used it as a home management problem for my homemaking class. My husband Richard and I carried out many of the suggestions the girls made, and I thought perhaps you would like to see it, as we plan to move soon."

The apartment was on a hillside. The front windows were below ground with a concrete areaway around them, and the back windows opened onto a porch that cut out most of the light. Yet all the rooms — entry, living room, bedroom, kitchen, and bathroom — were cheery, light, and friendly. The furniture was simple and inexpensive and spoke of individuality and good taste. Some of it Sara Louise had picked up at auctions for little or nothing and had used as a practical means of teaching refinishing, reupholstering, and slip covering and also for teaching values in choosing furniture and furnishings in relation to income and general effect.

Sara Louise said that the first miraculous change took place when she and her husband painted all the woodwork and some of the walls a light cream, since this alone seemed to bring sunshine into the apartment. But cheerful paint was not enough. It was important to have the house arranged to simplify housework, for Sara Louise carried a full-time job of high school teaching and her husband was rarely at home except week-ends, which very naturally they did not wish to spend on housework. She invited her high school class to help her.

The kitchen was the biggest problem, and at first it had seemed almost hopeless. The combination coal and gas stove, the sink, and the dish cupboard were isolated units located in different corners of

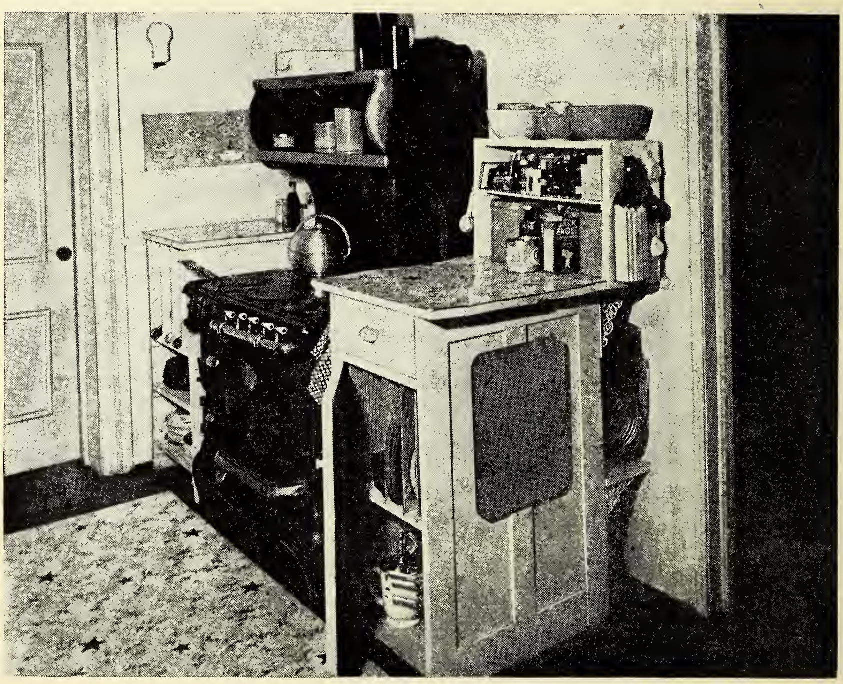


FIG. 40. Stove center, with part of an old desk for a counter.

the room and separated from each other by doorways or window openings; the ice refrigerator stood on the back porch. Her utensils and staple groceries were in the kitchen, as well as an office desk that had been cut in two, but nothing had been arranged. The girls went through the motions of doing the work Sara Louise would do in the room — getting breakfast and dinner, washing dishes, and eating — to find the most suitable place for each work center and the handiest arrangement of its contents.

They wished to arrange the following: near the stove, a mixing center and a storage space for stove utensils; at the sink, storage space for vegetables, for garbage and waste paper, for dishwashing equipment, and for the pots and pans in which water was needed before using; near the dish cupboard, counter space to set out desserts and salads and to put up lunches (Sara Louise's brother lived with them and carried his lunch); a table to serve for dining and as a desk where Sara Louise could figure out her menus, grocery orders, and accounts; a more convenient location for the refrigerator.

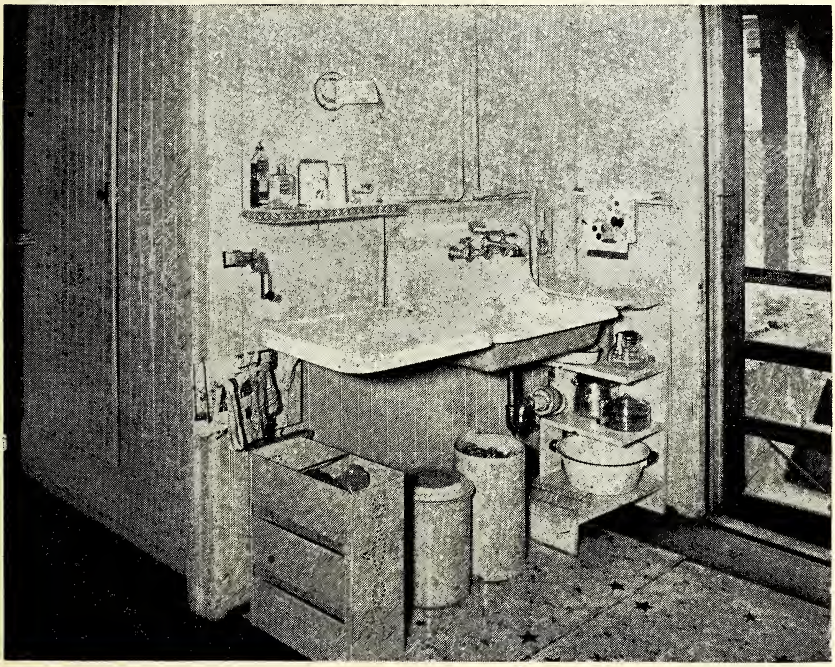


FIG. 41. Sink center, with place for utensils that need water.

They decided that work centers could be made from parts of the old desk that had been cut in two, and they measured how much additional lumber would be needed. They took accurate measurements of the available space in the desk sections, of Sara Louise's best working and reaching heights, and of the articles and supplies to be stored. In the classroom they drew up to scale the various work units.

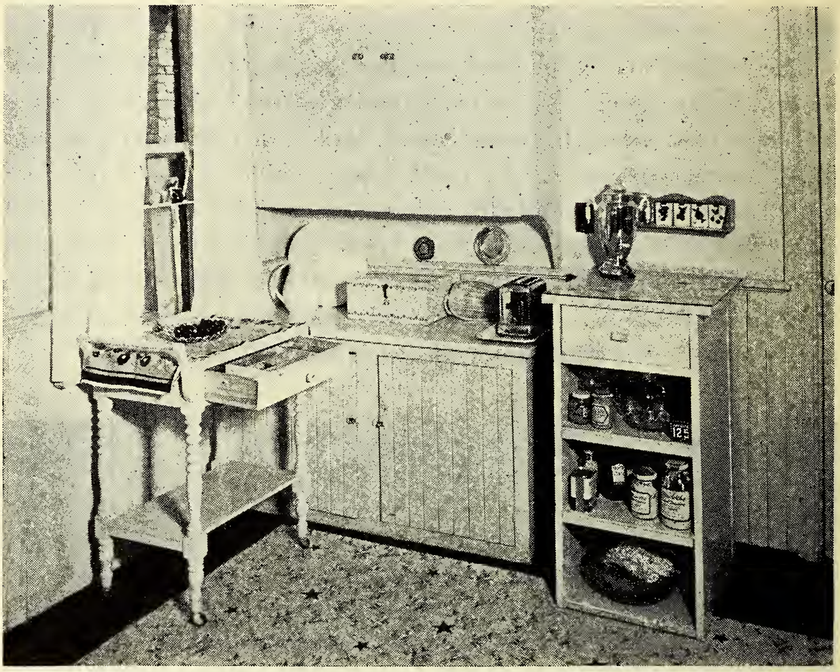


FIG. 42. Dish cupboard, service wagon, and the other end of the desk.

Richard built them. First, the drawer sections on both sides of the desk were cut away from the top, and some of the drawers removed and replaced by shelves. One of these sections (Fig. 40) was put at the right of the stove for a mixing center. The small set of shelves above was made from one of the drawers set on end with a shelf inserted. Space was left at the back of the cupboard and equipped with shelves fastened to the cupboard with iron brackets. These shelves, in addition to the cupboard Richard built at the left of the stove, took care of the equipment and supplies most commonly used in preparing meals, and of the trays for carrying dishes and food to and from the table. A few shelves discriminatingly placed around the sink simplified both dishwashing and vegetable preparation (Fig. 41).

Opposite the sink are the dish cupboard (Fig. 42), the service wagon made from an old washstand, and the other section of the desk. The cupboard doors originally extended to the wainscoting, making the counter space practically useless; but by shortening the doors and removing the lowest shelf, Richard made a useful counter space. In this center are kept toaster, coffee percolator, bread, and extra supplies; table silver is stored in the service wagon drawer. From here, the service wagon can be easily loaded and wheeled to the breakfast table or to the table in the living room. The breakfast table (Fig. 43) is beside the living room door and opposite the stove, with the dish cupboard at the left. On the shelf over the table are Sara Louise's recipe file and cookbooks, her bulletin board for menus, also the sugar bowl and the salt and pepper used at the table. The telephone and the directory are within arm's reach. Quilted seat covers of multicolored cloth add a touch of brightness to this end of the room.

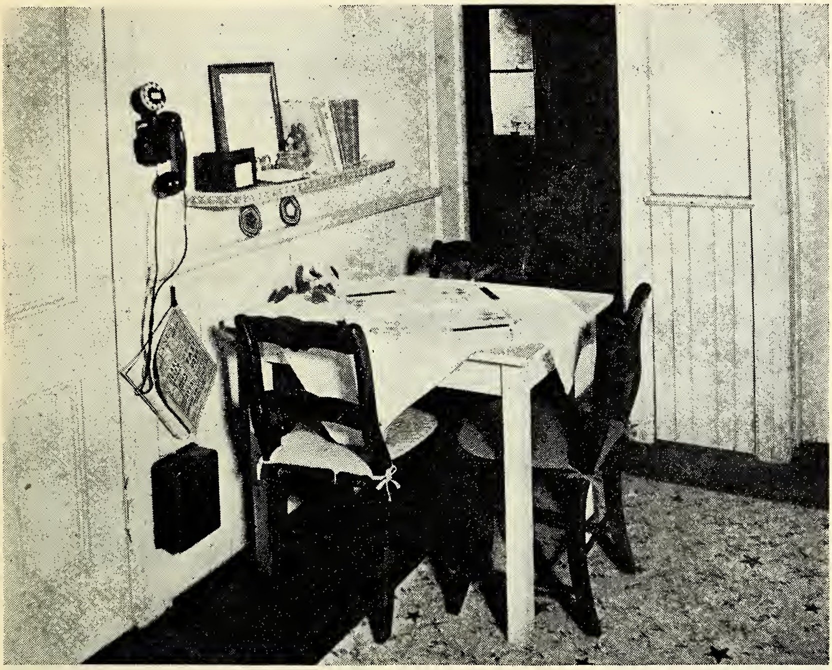


FIG. 43. Breakfast table and planning center, with telephone near by.

A high school student suggested turning the refrigerator at right angles to the door (Fig. 44). It had formerly stood with its back to the wall, so that Sara Louise had to go up the steps, walk around to the front of the refrigerator, put her tray on the floor, and stoop down to fill it. Now she need not go up and down the steps, and the tray is at a convenient height. Sara Louise considers this to be one of the major improvements that the girls thought of, and it cost exactly nothing.

When Sara Louise has guests, she pulls out the drop-leaf table in the living room, gets table linen from the drawer of the dresser, and wheels in the other necessary articles from the kitchen on the service wagon, which then serves as a side table (Fig. 45). The chairs in the living room were purchased unfinished from a southern handicraft establishment for $10, and Sara Louise and Richard oiled them. The old dresser originally had doors; these were taken off, the varnish removed, the piece oiled and waxed, and the inside painted a dull blue-green.

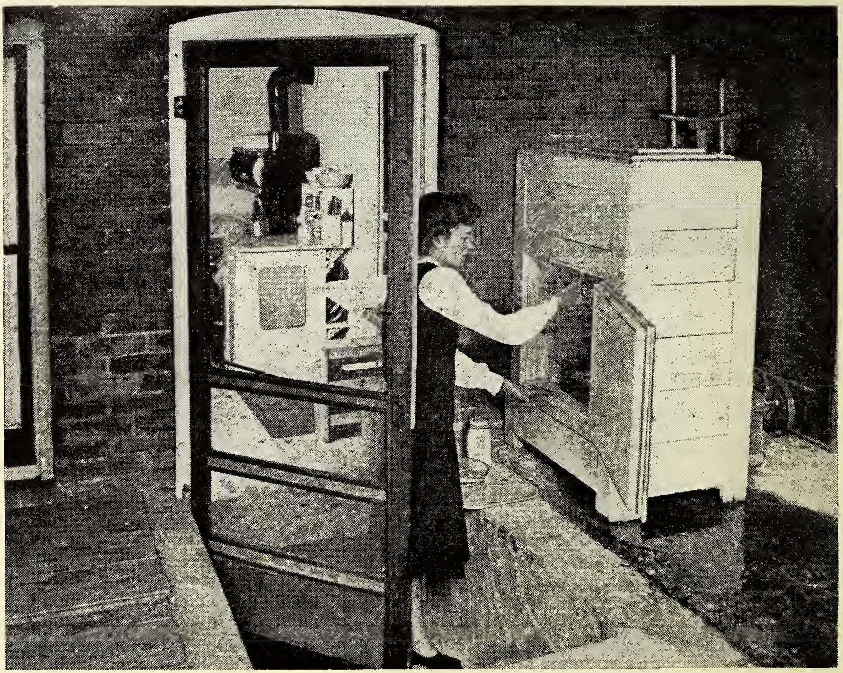


FIG. 44. The refrigerator turned sideways — an immense improvement.

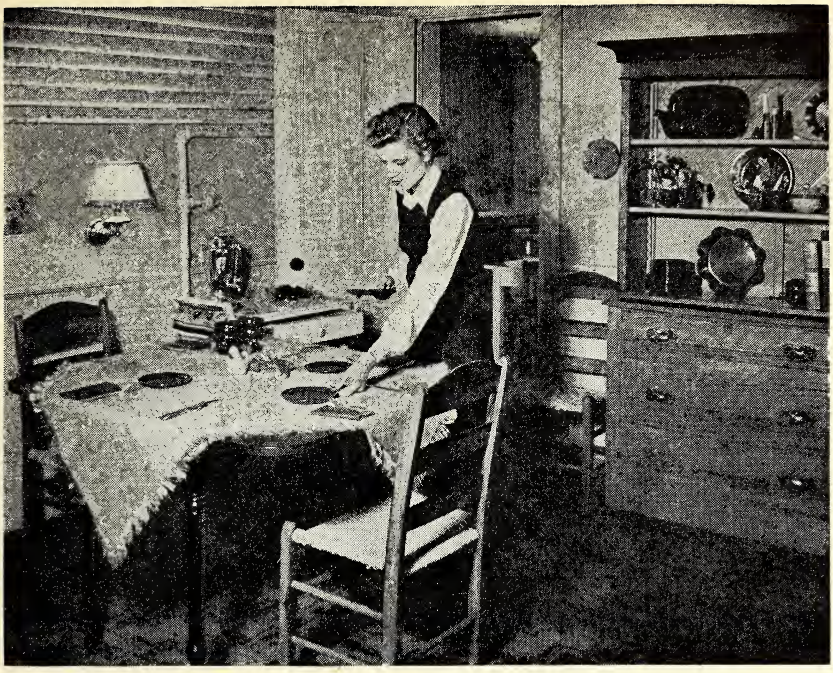


FIG. 45. The drop-leaf table in the living room is set up for dinner.

During the project Sara Louise had to encourage the girls continually to think of the kitchen in terms of its usefulness to her rather than in terms of "the way" to arrange an apartment kitchen. The mothers of some of the girls were skeptical as to whether the plans the students had made were really being carried out. To dispel this doubt, the girls invited their mothers to tea in Sara Louise's apartment after it was completed. They found it was true: an old office desk, some lumber for shelves, paint, ingenuity, time, and human energy had made a light, gay, and convenient kitchen.

IN HIGH SCHOOLS

If students in high school do not have the opportunity to start from scratch to make their homemaking rooms reflect the needs and spirit of their homes, they can at least make their laboratories more homelike than they are. The photographs in this section show how students who have visited homes came back to their school and adapted some of the ideas that homemakers found practical and helpful. It is

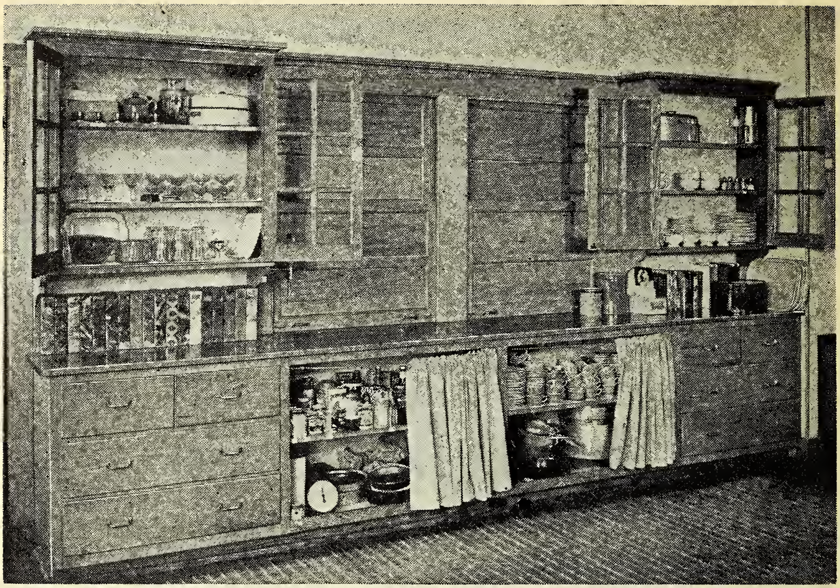


FIG. 46. High school students reorganized this cupboard, as shown opposite.

FIGS. 46, 47, 48. The cupboard shown above and on the opposite page is in a high school at the end of the foods laboratory room. This room has also several unit kitchens each equipped with its own service, but the high school teacher had to use this cupboard for serving school lunches and occasional large school banquets. It was crowded and inconvenient, though it had much space unused in the upper shelves. A school bus full of boys and girls was taken by their homemaking teacher on an extension tour to several homes in the county. From the homemakers they picked up practical ideas on how to save cupboard space and make dishes and cooking supplies accessible, and they undertook the rearrangement of the cupboard shown in its original state in Fig. 46. Fig. 47 shows their trial arrangement: pans and covers have been placed as if in vertical files, spices and flavorings have been collected to put into door racks, and saucepans are propped up as they would hang on the new cupboard doors which they have decided should replace the curtains. Trial shelves are being tested in both upper and lower cupboards by resting boards on cereal boxes and empty cans. The arrangement shown in Fig. 48 was decided upon after testing, and the school board appropriated the necessary money to put it into effect.

encouraging to know that in some instances classes of boys who were taking home economics attended extension tours to different homes along with their sister students. There they got ideas for conveniences, and had also the chance to recognize a philosophy of home management which perhaps they had not known existed. This type of teaching helps bridge the gap between homemaking in the schools and in the homes, and home management becomes practical and meaningful.

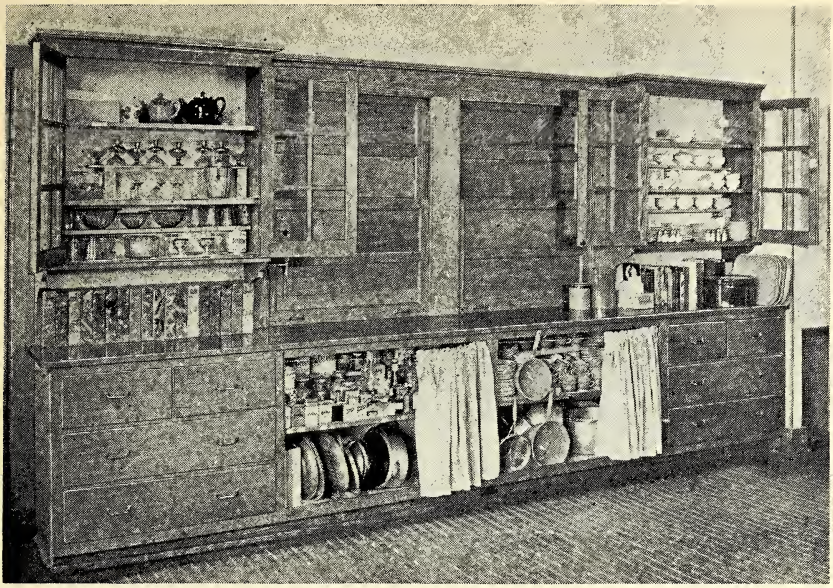
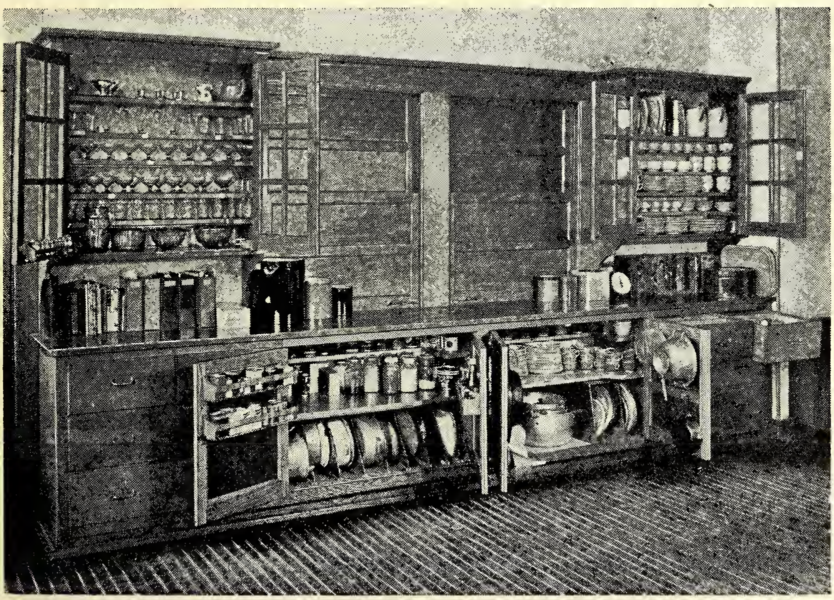
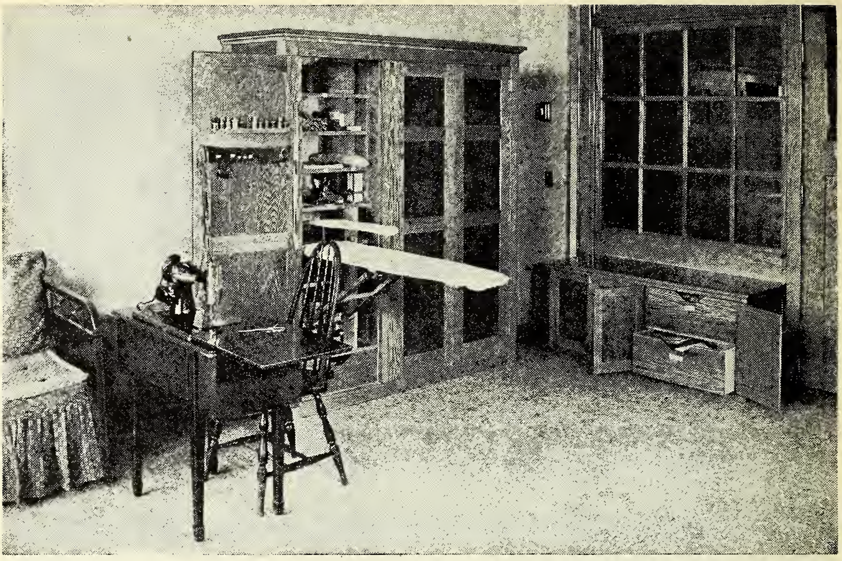


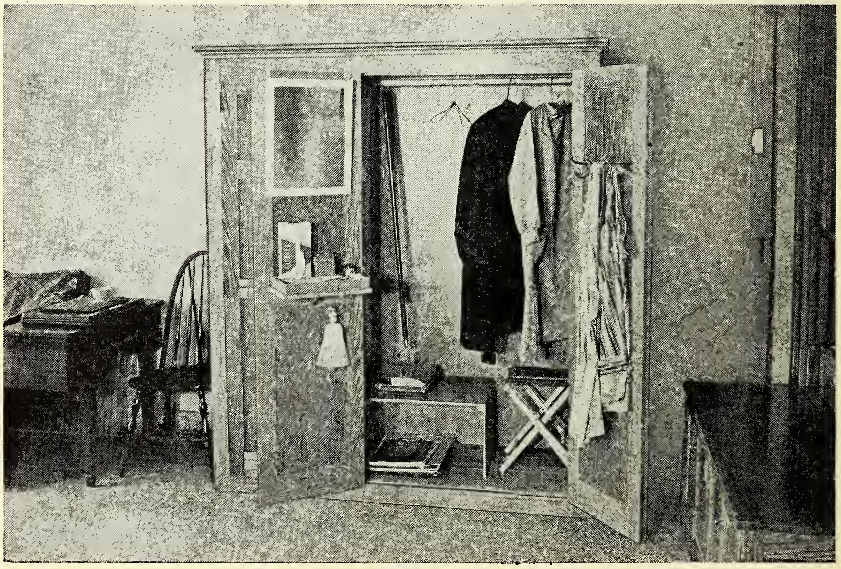
FIG. 47. The cupboard is in process of being rearranged. Pans and covers are to be filed, and the saucepans are to be hung on doors that will replace the curtains.

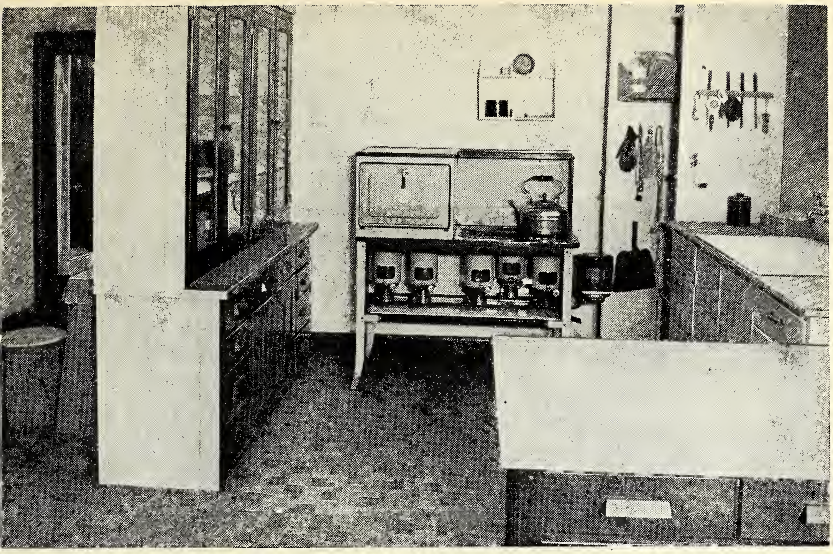
FIG. 48. Below is the final arrangement of the cupboard. In addition to its other advantages, the cupboard will now hold more equipment than it held originally.



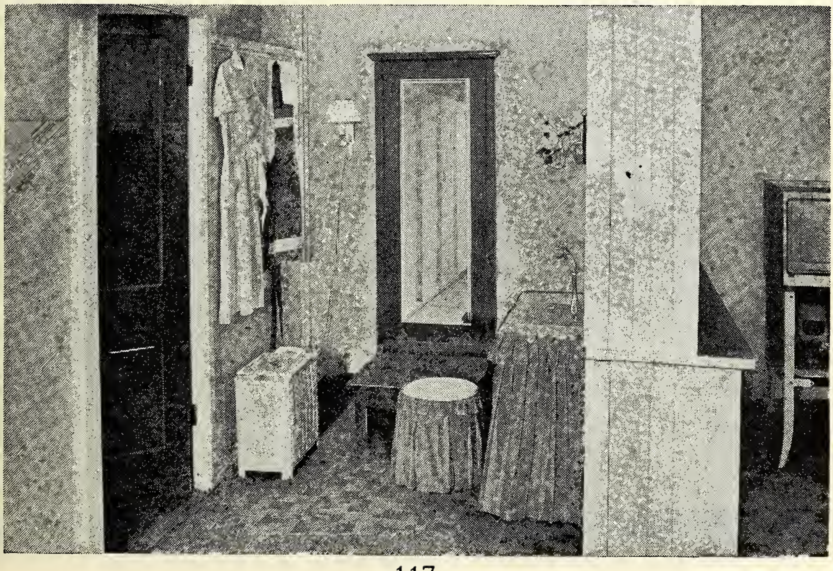


FIGS. 49 (above), 50 (below). In the school with the cupboard on the two preceding pages, the girls planned a combination sewing cabinet and grooming center for their living room. Above, the sewing cabinet is open. The shelves have been cut back to receive the ironing board which folds upright. All sewing equipment can be shut out of sight; unfinished garments can be hung on the rod in the cupboard. In Fig. 50 below, the grooming center is open, with mirror and shelf for grooming supplies on the door. A bracket on the other door keeps aprons from flopping. The sewing machine, when closed, serves as a writing desk and an end table to the couch.





FIGS. 51 (above), 52 (below). Teacher and students converted a stereotyped foods laboratory into the homelike kitchen above and the fitting room below. The big cupboard was flat against the wall. Turning it at right angles gave the kitchen a third wall, brought the kitchen supplies closer to stove and sink, and partitioned off a fitting room to supplement a small sewing room at the left. Students made the conveniences on the cleaning closet door, and are trying different finishes for the soapstone table tops. The dressing table is made of two orange crates supporting a board; the stool is a padded keg. A screen shuts off fitting room from kitchen.



FIGS. 53, 54. The kitchen in Fig. 53 was one of two used by homemaking classes in a small high school. The teacher brought a class of thirteen students to the college laboratory, where the girls went through the routine of preparing breakfast in the laboratory kitchen (Fig. 54), while the college home management students charted their travel to show ways of cutting down on time and steps. By placing the upright cupboard for cleaning equipment between the kitchens (Fig. 54), room is made beside the stove for an extra table. In Fig. 53 is shown one of two washstands which the girls selected, refinished, and covered with linoleum; its height is better for mixing and beating than the counter at the right of it. This seemingly small washstand project did more to interest the members of the community in their home economics department than anything that had been done before. They thought it was practical. These students lived near enough to come to the college laboratory for this test, but this might not be possible for all schools. A school which could own its set of equipment might find it of great value. Refer to pp. 275 f.

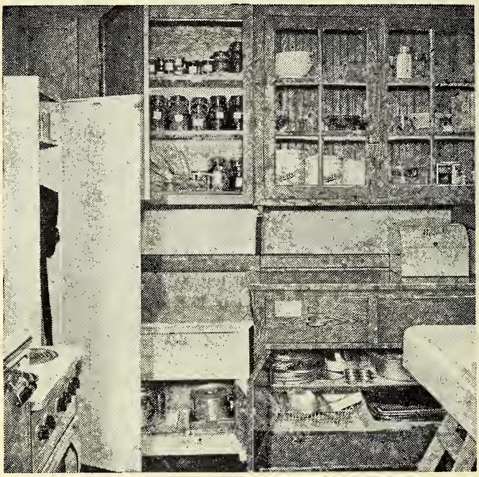
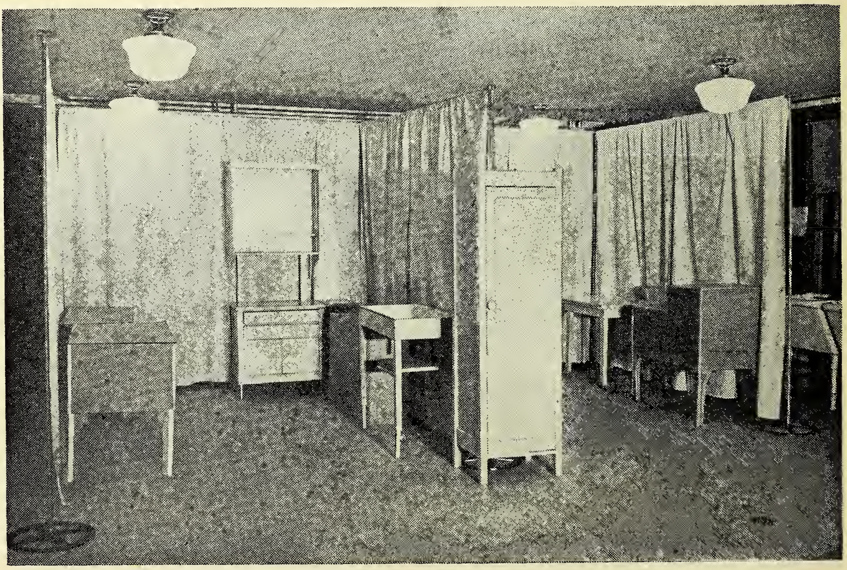
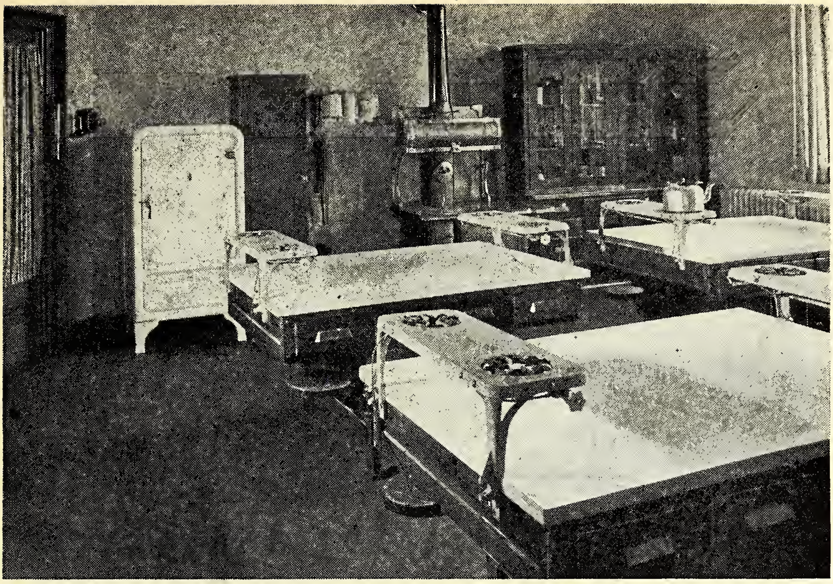


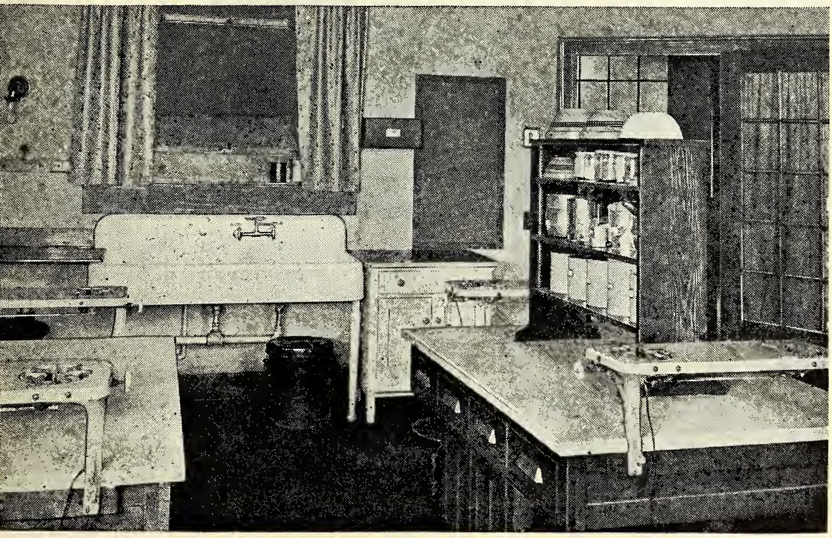
FIG. 53

FIG. 54





FIGS. 55 (above), 56 (below). This old-style laboratory offers many possibilities for remodeling. The only storage closet was in the corner. The teacher carried all supplies for the class period to a central table, and returned what was left after class. To obviate this, teacher and students planned the set of shelves shown in Fig. 56 below, to hold the supplies and equipment for the term. Adjustable shelves permitted succeeding classes to rearrange the shelves. They painted tin cans to hold the supplies. An old washstand at the right of the sink provided an inexpensive counter. Plans were under way to change the position of the gas burners and to revamp the tables.



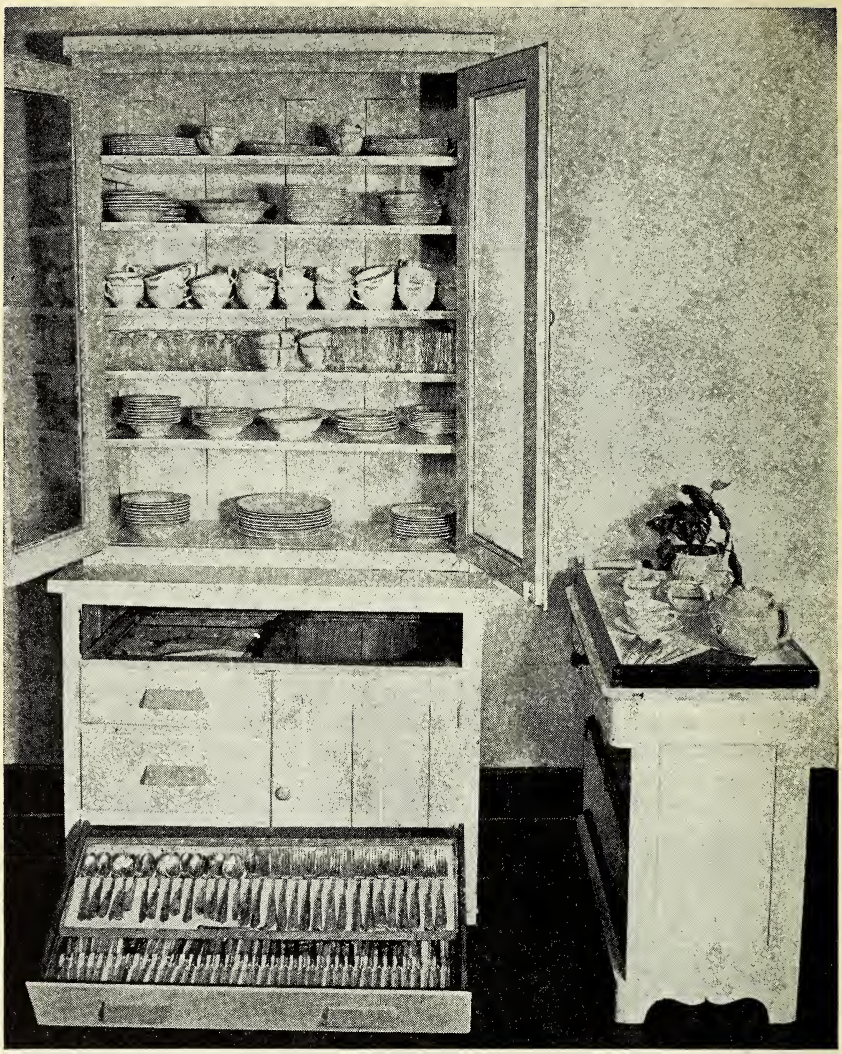


FIG. 57. In converting an unused section of their homemaking laboratory into the home kitchen shown on this and the two following pages, the girls in this high school started out with this cupboard, the base of a kitchen cabinet (Fig. 58), and a table.

FROM HIGH SCHOOL TO HOME

Kate Allen, an alumna of the state college at X, had visited many homes in connection with a course in home management. She had seen families of different incomes managing well with the resources they had, some ample and some meagre. When she secured a posi-

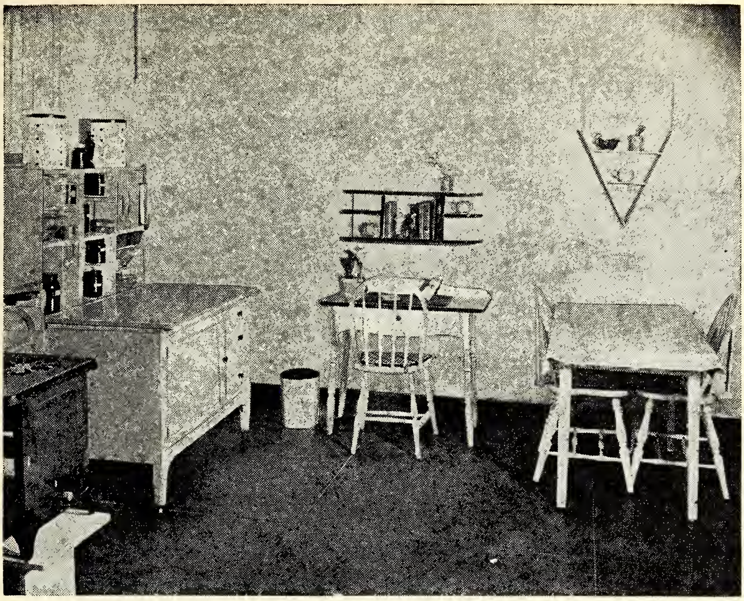
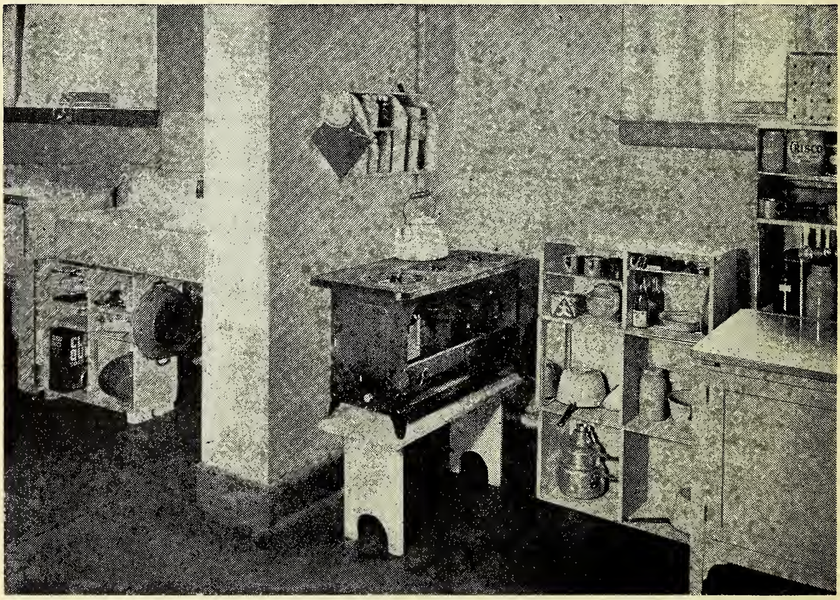


FIG. 58. Into three orange crates the girls put extra shelves to make top cupboards to go in back of the base of the kitchen cabinet. They designed and made the little wall shelves, and painted everything a warm ivory with a decorative dark trim.

tion as homemaking teacher in a central high school, she decided to make home management a functional part of her teaching. She visited the homes of her pupils to have a better understanding of their resources, values, and ways of living. For a class project her senior class chose to convert an unused extension to the foods laboratory into a kitchen such as might be found in many of their homes. This kitchen would be useful for teaching meal preparation at school. Their original equipment consisted of a dish cupboard (Fig. 57), the lower section of a kitchen cabinet, and a kitchen table (Fig. 58). The girls arranged this and other makeshift equipment to represent a kitchen. They planned meals and went through the process of preparing them and made charts showing their lines of travel. These were studied and rearrangements were made to cut out unnecessary walking. They checked and averaged their own best working heights, since each would at times use the different pieces of equipment.

They then set about equipping this kitchen to make it as convenient as possible for four girls working together at one time, as they would do in school. From orange crates they built a top section for the cabinet (Fig. 58), shelving this so that each article used there would be as conveniently placed as possible. They readjusted the shelves in the dish cupboard and arranged the dishes within easy reach, with the heaviest at the bottom and those used least often at the top (Fig. 57). They designed and made a slip tray for the silver drawer, covering the framework with cloth to prevent the silver from being scratched. They made a teacart from a second-hand washstand by removing the doors and one of the towel racks and installing gliders (Fig. 57). Since some of the girls in the class used kerosene stoves at home and there were none in the foods laboratory, teacher and students together visited second-hand stores, where they finally found a three-burner oil stove. This they purchased for $4. The class cleaned, refinished, and adjusted it, and built a bench for it to stand on which brought it to a height convenient for most of them (Fig. 59). Then for working convenience, they made additional storage space near by. They found in the building a small desk; they designed and made a shelf to put above this, and another shelf for the wall over the

FIG. 59. Because many girls must cook with oil stoves at home, the girls bought this second-hand one and made the bench for it to stand on. They converted orange crates to hold cooking utensils near the stove and cleaning materials near the sink.



dining table (Fig. 58). Help in constructing the conveniences was given the girls after hours by the manual arts teacher. When the principal saw the results of their efforts he gave them money to buy paint, which they applied themselves.

When the home management class at X visited this school, several of the girls told of conveniences they had made for their kitchens at home as a result of this experience. To be sure, this kitchen had no sink and the oil stove was slower than the gas and electric ranges in the foods laboratory; but such inconveniences exist in many homes, so the girls studied how best to get along without them. This kitchen was not used for all foods classes, but on the days it was used the girls considered it a treat to work in it.

SUGGESTIONS FOR DISCUSSION AND INVESTIGATION

1. Discuss the pieces of equipment you think are best in high school or college unit kitchens. What do you think should determine the quantity and kinds of such equipment? What are some of the disadvantages of having the equipment in homemaking foods laboratories too durable?
2. Discuss the advantages of having unit kitchens completely outfitted with homelike equipment, some of it inexpensive. Compare this with unit kitchens equipped with uniform, high-priced laboratory equipment. Which is more likely to help the student (1) to prepare meals at home, (2) to know the relation of the kitchen to the ease of meal preparation?
3. Consider the possibility of furnishing a high school homemaking center with canvas curtains, panels, or screens, and with movable equipment or cardboard facsimiles, as described in Chapter 16. To what use could such movable equipment be put? How much would it cost? If you had this equipment, in addition to the homelike unit kitchens discussed in the preceding question, compare this complete equipment with standard unit kitchens (1) for practical results, (2) for cost.
4. Do you think it would be valuable to the mother of a high school student to have her kitchen set up with such laboratory equipment and to work with the class on improving her kitchen? Would it be valuable to mothers to visit the school and watch their daughters demonstrate ways to overcome some of the obstacles families have to contend with in their homes? Discuss. Would such a project be of value to students? Give reasons.
5. Discuss the conversion of the laboratory cooking table, shown in Fig. 56, into a convenient kitchen cabinet in relation to the development of the students' creative ability. How might you expect such a project to affect directly the students' homes?
6. If a student learns to bake successfully in an electric oven at school, discuss what is likely to happen when she must use a wood or coal stove

at home. Has she learned less than was useful to her, or more? If you should need immediate information on the use of an electric range, to what local service could you apply for such help? Ask the home service representative of your gas and electric company to talk to your class.

7. Discuss some of the advantages of the old-fashioned kitchen cabinet. What is most conveniently stored there? Is there a place in it for the required things? How could the space in it be better adapted to its contents? What additional conveniences does it need? What is the possibility of students' making these? Which of its convenience features would you like to see incorporated in some of the modern, streamlined cupboards? Study your kitchen cabinet or cupboard at home. How can you make it more convenient? Consider the advisability of putting a second-hand kitchen cabinet into one of your unit kitchens.
8. Investigate second-hand stores or other sources of old furniture for pieces that members of the class can use or convert into convenient equipment for their unit kitchens. What would be the advantages and disadvantages of orange crates? How would you make a second-hand washstand or an orange crate sanitary? Send for bulletins on household pests.
9. How could Kate Allen's movable equipment have been used in school to solve Sara Louise's kitchen problems? What extra equipment would she have needed? How would you supply substitutes at little expense? How might succeeding classes benefit from this movable equipment?
10. In some homemaking centers, unit kitchens are set up for low-, medium-, and high-income families. Considering what effect this terminology might have upon the attitude of girls of teen age towards the "low-income kitchen," what terminology could be used that would set a value on the so-called low-income kitchen?
11. During the war, manufacturers of school equipment are seeking for new ideas to make equipment meet more nearly the needs of families. How can students, teachers, P. T. A. members, and members of boards of education cooperate with manufacturers to make the homemaking room function more usefully for the benefit of the homes in the community?
12. What do you consider to be the advantages to high school students and their teachers of attending extension tours to homes in which families have managed to adapt their resources to their needs and desires? What are the values to the families visited? Discuss other types of cooperation between teachers, Home Demonstration Agents, and homemakers.
13. Find out which homemakers in your community are especially skilled in some household task, and ask one or more to give a demonstration to your class, either in her home or at school.
14. In some high schools and colleges, girls of very different heights have to sew at uniform height tables, sitting in uniform height chairs, and often in poor light. What effect has this on their posture and on their health?

CHAPTER 10

STUDENTS TELL OF THEIR OWN HOME MANAGEMENT

Students who have visited and worked with homemakers on their problems have in most cases turned to their own homes for a term problem in home management. These are reported in writing, and are frequently used as teaching material for other classes. Two such reports follow; they have not been edited. The diagrams are the students' own attempts to get their ideas across, and are reproduced as drawn by them. The following report is by Eve, for whose study problem see page 48.

REHABILITATION OF A KITCHEN

Mary and I spend quite a bit of our time while at home in our kitchen preparing, serving, and cleaning-up after meals. So when we started on our course in household management we discovered that working in the kitchen could be made a lot more pleasant and less time-consuming and easier if we applied a few of the principles we had discovered in class. After working on our room, we realized that wonders could be accomplished.

The fact that mother was anxious to have us do something constructive about the kitchen and that she set no limitations on what we could do gave us free rein. Although Mary and I work more in the kitchen than either mother or Alice, we had to consider their reactions to any drastic changes we might introduce, so that it would not be too hard for them to adjust to the new situation. One factor we had to consider was that we rent the apartment we now live in, so that permanent changes in built-in cupboards or partitions could not be attempted (Fig. 60). Mother doesn't mind things hanging around on the walls, in fact she already had some up, so that point which offends some people's esthetic sense did not need consideration.

About the middle of the term a management conference was held in our kitchen. About one third of the class was present.

First of all, our dishwashing center has always been inconvenient for us, as the drainboard is on the right, making it necessary to stack the dishes on the surface at the left and wash to the right (Fig. 61). We preferred it the other way, because as it was the dishdryer had to walk around the dishwasher to the cupboard at the left to put the dishes away. There was not too much space on that left surface as it was, because the breadbox sat in the middle and next to it were all the cleaning materials, soap flakes, water softener, soft soap, and steel wool. The dishpan and drainer hung on hooks under the sink, making it necessary to bend down twice to put them away. Usually one didn't connect the first time so it, either the dishpan or the drainer, fell to the floor with a loud bang. It was a little hard on the people downstairs.

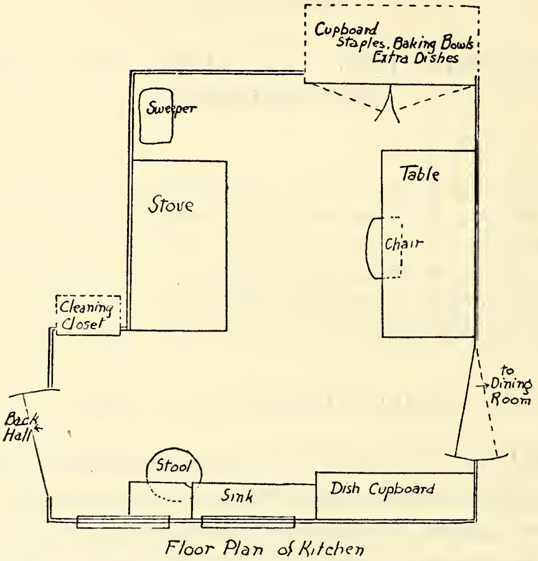

Cupboard
Staples, Baking Bowls
Extra Dishes
Sweeper
Stove
Table
Chair
Cleaning Closet
Back Hall
to Dining Room
Stool
Sink
Dish Cupboard
Floor Plan of Kitchen

FIG. 60. Eve illustrated her report with this almost professional diagram.

We knew right away that the direction of work ought to be changed so that we could work from right to left and put the dishes directly into the cupboard after they were dried. Then the question arose of how we were to make the surface at the left into a drainboard. The surface was flat and covered with linoleum, but nevertheless we knew we would soon be swimming in water if we tried to rinse the dishes on it. First we shoved the breadbox all the way over to the wall on the left and took all the cleaning materials off, and the surface was certainly big enough even to stack some of the dishes before putting them away. Suddenly my eye lit on a large metal tray sitting beside the stove and we tried it out for size. The drainer fitted in with ample space left over for excess water. Then some one suggested an orange crate under the sink for the cleaning supplies. We still had the orange crates used in our temporary setup for the desk, so we hauled them out and put one under the sink (Fig. 62). The dishpan just fitted in on top of the orange crate and under the shelf, while the drainer could be hung on the side. The tray could slip in between the orange crate and the cupboard. There was still the problem of where to stack the dirty dishes. The drainboard didn't seem large enough to us for all of the dishes, but we could stack the pans on the stove. We wondered about an extension to the drainboard or a tea table that would slide under it. We got down the old desk that had been in our room and tried it, and found that it would need an inch sawed off each side to make it fit and somehow it seemed too good a piece of furniture to mutilate. We finally decided to let it go as it was and consider as we worked whether there was a real need for any more space. As it turned out we have discovered that it is satisfactory the way it is, and the extra steps taken by the "washer" in getting pots off the stove do not warrant any change.

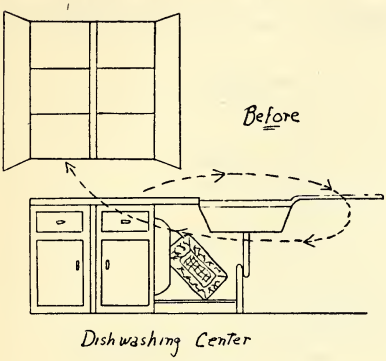


FIG. 61.

Eve's drawing gives her problem.

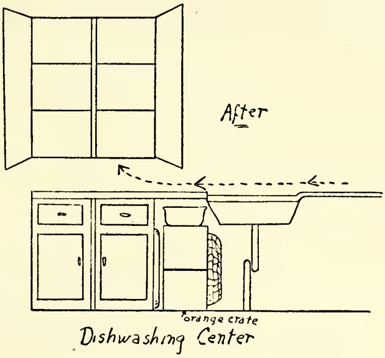


FIG. 62.

And, as neatly, her solution.

The coffee and cereal problem was another thing that worried us. We have to make coffee every morning in quite a hurry, and hot cereal every time my father is home, as oatmeal and dad are inseparable. The utensils and food for both were scattered all over the kitchen so that we rushed around a bit in a fog, especially early in the morning. So the other orange crate was put in between the stove and the wall, and the coffee and the coffeepot were put on top of the crate, almost at stove level (Fig. 63). The double boiler, a small box of oats, and the large coffeepot go on the shelf, while all the dry cereals go on the bottom. In that way, the things we use in coffee and cereal making are right next to the stove, and the dry cereals are convenient to the table where we usually eat breakfast during the week. I might add that it has been a tremendous time-saving device for us and seems to simplify breakfast-making.

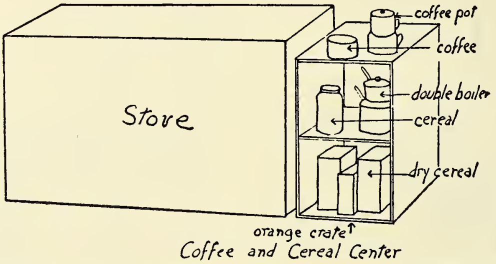


FIG. 63. Eve's drawing of her orange-crate cupboard has nice perspective.

Next, the management specialist had us take out all the articles from the side shelves of the stove and decide where we used them. The large lids we left there and also the large frying pans and the roaster. For the smaller tins we rigged up a little pocket-like affair from a paper bag and placed it on the wall beside the stove so that we wouldn't have to lean down each time we needed a tin. Most of the kettles and saucepans were hanging on the wall and extended from the supply cupboard around to the stove. Quite a few of the things, such as strainers and two of the big kettles, we found we used by the sink, so we pounded a few nails and put them up on the side of the cupboard near the sink and under the window to the right of it.

Then there were various other problems on which the girls worked after dividing up into smaller groups; i.e., the ordering center, where to put the carpet sweeper, the drawers in the dish cupboard and in the table, and finally the large supply cupboard.

One group worked out a temporary order center from a paper bag, holding paper and pencil, which was tacked up on the door jamb. Another group found space in the cleaning cupboard for the carpet sweeper, while another group straightened out the kitchen utensil drawers, putting the things we use at the sink, such as small knives, potato peeler, etc., in the drawer by the sink.

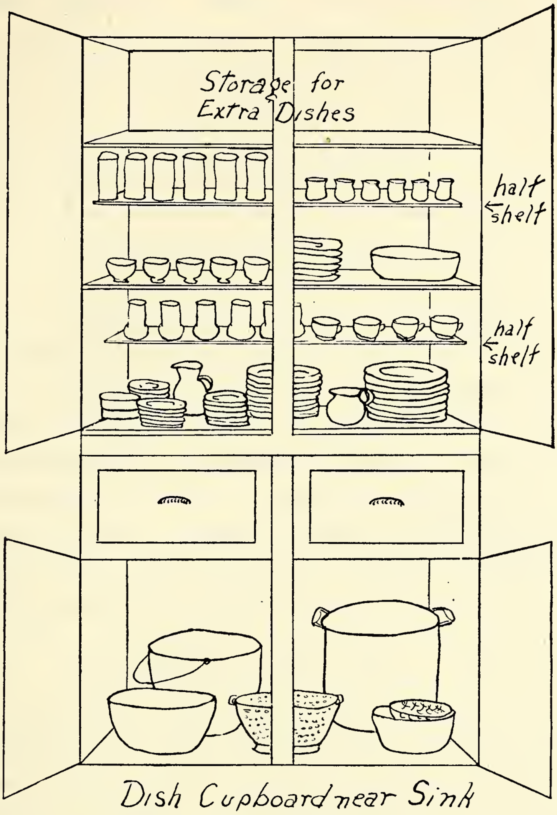


FIG. 64. Eve's drawing gives her shelf problem in accurate detail.

That left us the big supply cupboard. The shelves are very deep so that lots of things just got lost in the dark confusion. For spices, we put up on the door a little cheese box that the management specialist donated to the cause, and on the other door we put the waxed paper. We set up a temporary half-shelf on which we put all the bottled things, such as vanilla, cake colorings, etc.

We were quite enthusiastic about all of our changes and were eager to try them out. We ran up against one trouble immediately. Alice in wiping the dishes had quite a struggle to remember where to put things in their new places. Even now, she sometimes forgets where the little knives go, and one of the things we want to get is a knife case to put under the window beside the sink where no one can miss it.

We found in working that all of the changes were fine as far as they went, but they didn't go far enough. The supply cupboard was still a trial, and the dish cupboard needed some definite attention. So one Sunday afternoon Mary and I got busy with hammer, nails, and saw, got some crating wood out of the attic, and built four half-shelves, two for each cupboard. In the dish cupboard (Fig. 64), on the first shelf, had been all of the flat dishes except the butter plates, so piled as to obliterate a small platter which stood behind them and to interfere with a dozen cups hanging from the shelf above. Getting the platter out over the dishes without knocking off a few cups always had been a problem. We took out all the dishes and only put back those that we use every day. We found room for the butter plates, and put on our half-shelf at the back of the cupboard four cups and six glasses — only those we used every day. On the next shelf, we put the gravy bowl and a number of glass hors d'œuvres dishes and serving dishes which had been high up in another cupboard and difficult to reach, hence never used although mother wanted us to use them. On the half-shelf are the rest of the glasses. We intend to put on the door another little cheese box in which to keep orange juice glasses.

In our supply cupboard (Fig. 65) was utter chaos. We took all the things out and tried to decide what to do about them. We concentrated on the dry supplies for a while and consolidated a few, then we put some half-shelves on each side of the second shelf, next to the wall, where things would not fall easily. We put boxes and supplies along the back of the shelf, where we are able to see them and to reach in and get them out without doing a jujitsu. We fitted in all the supplies under and on top of the half-shelves, so that we had a square U-turn effect — could see everything and get anything.

On the third shelf we plan to have vertical files for pie tins, cake tins, platters, muffin tins, and other flat baking dishes. On the fourth shelf are crackers, and on the top shelf are extra dishes. On the first shelf are the shortening, large baking bowls, vinegar and oil to make French dressing, and the brown and white sugar bowls that are used for breakfast every morning.

We have also planned for two hanging shelves to be put over the table and just to the right of the supply shelf, the first to hold the cans of flour and sugar, the flour sifter, two measuring cups, baking powder, vanilla, swirl mixer, and the toaster. The toaster will be put here because it is right beside the door to the dining room and can easily be put on the table there or in the kitchen for breakfast. On the second shelf are to be four bowls of graduated sizes, a cardcase of recipes, and three recipe books. On the front edge of the right end of these hanging shelves will hang four measuring spoons of graduated sizes. The rolling pin will hang on the wall at the left. On the wall between our proposed shelves and the table already hang such things as egg beaters, scissors, and can opener.

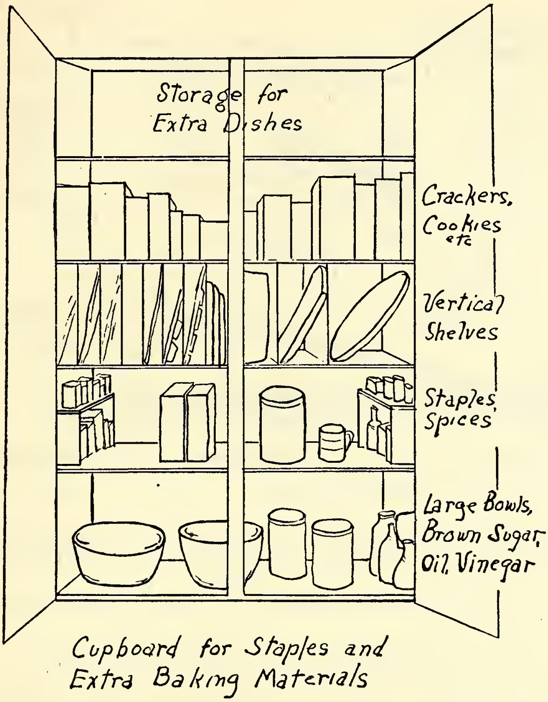
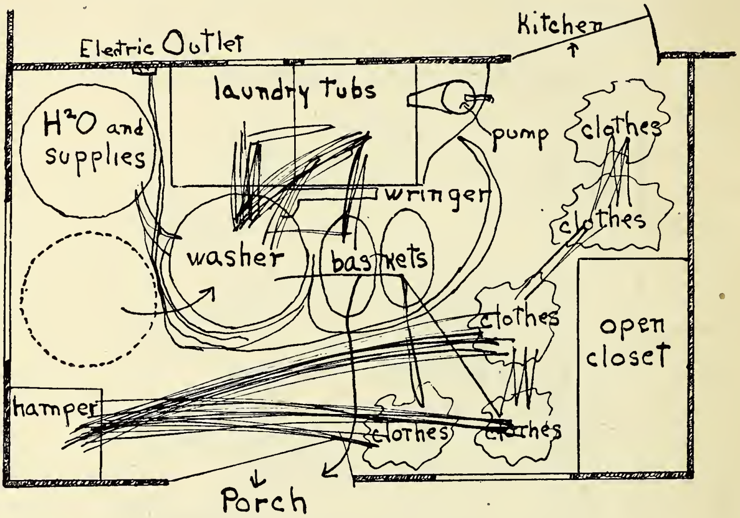

Storage for
Extra Dishes
Crackers,
Cookies
etc
Vertical
Shelves
Staples,
Spices
Large Bowls,
Brown Sugar,
Oil, Vinegar
Cupboard for Staples and
Extra Baking Materials

FIG. 65. Eve's drawing gives her side shelves and the files for pans.

We worked also on the shelves under the dish cupboard (Fig. 64). Most of the baking things in there are to be ultimately put in our vertical file, so that we will have ample room for the largest kettles, the colander, and the deep-fat-frying implements.

When mother saw what we had done she really felt that we had accomplished something at last. She was a little wary of our plans after the kitchen conference and wasn't too sure of our ultimate aim. Now she is going right ahead, getting a carpenter to build the hanging shelves.


Electric Outlet
Kitchen
laundry tubs
H^2O and supplies
pump
clothes
wringer
clothes
washer
baskets
clothes
open closet
hamper
clothes
clothes
Porch

Mother's lines of travel in original arrangement

FIG. 66. Sal illustrated her mother's problem with great enthusiasm.

THE PROBLEM OF A HOME LAUNDRY

Doing the laundry for a family of six is my mother's biggest household job and the most tiring. We live on a hundred-acre farm in H County. The house is large, fourteen rooms, and is heated by a pipeless furnace in winter. My kid sister, twelve, can be a great deal of help to Mother if she wants to. My twin brothers, eight, and my youngest brother, six, help Dad with the farm chores. We are a clean family, fundamentally, but not meticulous at all. Even so, doing the laundry for a family of six is not accomplished with a snap of the fingers.

Mother does the family laundry every other week. It is more efficient and less drudgery for Mother, and the family wardrobe is large enough so that it can stand the strain of two weeks. Mother gathers the clothes from the bathroom hamper upstairs, the downstairs bathroom, and the laundry hamper. They are then sorted on the kitchen and laundry floors (Fig. 66) for dirtiness and color. The family wash usually takes about eight loads in the washing machine and, exclusive of starching time, takes about an hour and a half to finish. The soap and bluing are stored on top of the water heater,

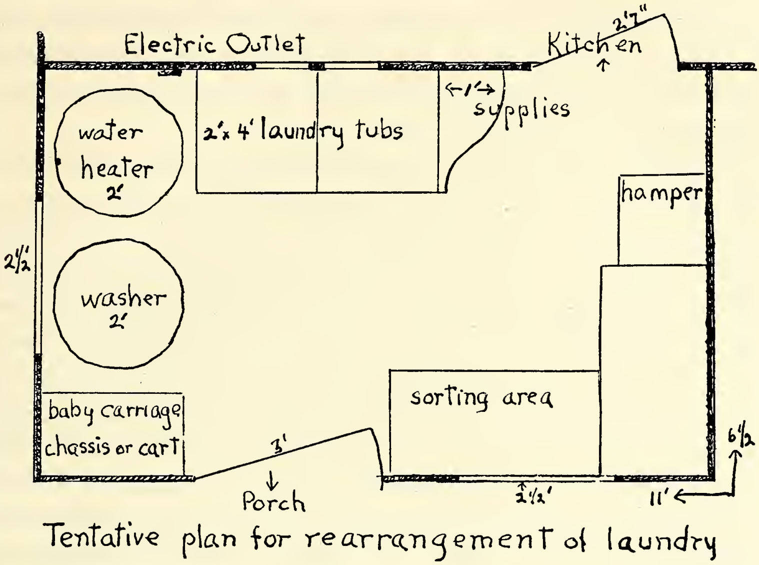

Electric Outlet
Kitchen
2'7"
←1'→
supplies
water heater 2'
2'x 4' laundry tubs
hamper
2½'
washer 2'
baby carriage chassis or cart
sorting area
3'
Porch
2½'
11'
6½
Tentative plan for rearrangement of laundry

FIG. 67. Sal's drawing gave all measurements meticulously to scale.

and after the washing machine has been moved over in place before the laundry tubs, the soap and bluing are put in the washer. The washer is filled by filling pails in the laundry tubs from the movable faucet and lifting them over the tub and into the washer. The tubs are quite deep, and the strain is tremendous by the time five and a half pails have been lifted. Mother once tried to use a hose, but it had to be held on the faucet and that was more trouble than the hose was worth. While one load is washing, Mother hangs the other load on the line. The clothes are rinsed in hot water first, then pass into the wringer to the cold rinse, and through the wringer again to the clothes baskets. The baskets are carried outside to the back porch and placed on crates, and the clothes are hung on the pulley clothesline that extends from the porch about 200 feet. In winter the clothes freeze, and some are brought inside and thoroughly dried over the pipeless furnace. The water in the washing machine is not changed throughout the whole washing period, but is diluted with hot water from the laundry tub which is refilled with hot water from the faucet. This keeps the water in the rinsing tub hot and clean. After the last tub has been rinsed, the washer is emptied into pails which are lifted up over the laundry tubs and emptied. This lifting makes the washing so much more tiring than it should be. In Mother's laundry working habits were several examples of careful thinking and good management, but there were also several problems which made the family wash a fatiguing and dreaded task.

Our laundry used to be the pantry and back entry of the house. When I was very small they were combined into a back entryway, and a few years later Mother made it into her laundry. It is on the first floor between the kitchen and back porch and still serves as the entryway, the main thoroughfare of the family. It is unheated, except for the warmth that comes through the open kitchen window over the laundry tubs. It is therefore uncomfortable to work in, and the water pipes sometimes freeze. The laundry is electrically equipped and wired. Beside the tubs is a hand pump which Dad once bought for $50 and installed so that should the electric pump to the well fail, this pump could be used to draw water from the cistern. It has never been used and it doesn't work. The two deep laundry tubs are made of concrete and have a common faucet with a rotating spout. We have a fifty-gallon electric water heater and a washing machine with a swinging wringer and a mangle attachment. A wicker clothes hamper is the family "catch-all." There is an open clothes closet with a shelf in the corner. It hides the tin-can box, the overshoes, raincoats, canning kettles, sports equipment. There are a couple of pails, three wicker clothes baskets, some apple crates, and clothespins. These are the resources that Mother has to work with. Dad has very little time to do any carpentry job, but if he can find time, he does a grand job.

So Mother and I went to work and came out with seven big problems that were making the laundry tiring. They were: cold, of laundry and outdoors; inconvenient storage of equipment and supplies; lack of sorting area; bending and lifting clothes; filling and emptying the washing machine; gathering the clothes; and storage of the "junk" in the clothes closet. While I was home for Christmas vacation, I watched her organize her work and drew a motion study chart of her preparations (Fig. 66). As she worked she made comments about problems and sudden ideas for their solution, which I wrote down. Mother said that the hose might have worked for emptying the washing machine, but that the buttons got stuck in the hose and then it was more bother cleaning out the hose than it was worth. I had a bright idea and rigged up a drain covering made of two can rubbers and some gauze to catch the buttons before they could slip into the drain and hose.

After vacation I brought back my notes and a floor plan drawn to scale, and we set up the laundry in the laboratory. I outlined the situation and listed the problems, and then the ideas of the girls were pooled for possible solutions. Some ideas had to be discarded because of standards or conditions at home. For instance, the suggestion was made that the clothes be hung on the porch to avoid the wind, but that would block the back entrance and would not save any discomfort because the clothesline is pulley anyway. Also the furnace room (dressing room) is too small to hang the whole wash at once. However, many of the ideas seemed highly workable. In addition to this pool of students' ideas and experience, we had the added resources of Mother's experience in homemaking and in the Home Bureau and her natural yen for improvement, and my own imagination and observations in homes visited in the course. There were also suggestions found in illustrative material on laundries.

[Part of the report is omitted. The concluding letters, which are in the report, cover the same ground. See Figure 67.]

Dear Mom:

We worked on your laundry problem in lab yesterday afternoon. Here are the pooled suggestions of the class. Will you write as soon as possible and tell me what you think of them?

Cold: We wondered if you couldn't use the electric heater in the laundry while you were working so that you wouldn't be so cold. The clothespins might be heated in the oven and would keep your hands warmer while you are hanging up the clothes outside. Couldn't you buy a pair of white knitted wool gloves to use for that exclusive purpose?

Do you have to hang the clothes outside? Considering the floor plan of the house we wondered if the clothesline couldn't be hung in the front hall by hooks from the front door and the partition. The door into the living room could be left open for extra ventilation. By stringing the rope about 6 inches apart, you could easily hang up all the eight washers full. Those things which you wanted to dry quickly could be hung in the dressing room over the furnace. This would eliminate hanging wet clothes outdoors. Will you try drying some clothes in the front hall on the folding rack the next time you wash so that we can see if the drying time is too long and therefore inconvenient?

Sorting Space: We all thought your idea of a drop-leaf shelf for making a sorting space out of the wardrobe closet was ideal. We had a few suggestions there too. The surface could be made in L shape, the longest part under the window. At the short end have the hamper, with a removable lining made by stitching two feed bags together. This can be pulled out and dumped on the sorting surface and will eliminate all that bending. Or you might use a wooden cane or a wooden pair of ice tongs to get the clothes out of the hamper.

There was another suggestion made for your sorting area. Make your L-shaped surface of orange crates lying lengthwise, and have about five or six bushel baskets on them. Then as the clothes are brought down they can be preliminarily sorted and save all that later work. It seems to me if this was worked out, you would need a sorting surface too, to do the final sorting. Could you try this bushel basket out in the laundry before constructing any permanent surface and tell me how it works?

Remember your comment on the inconvenience of gathering the clothes? Could the kids bring down their dirty clothes as they become dirty and put them in the proper place? This would be part of their pick-up job, and they would have to pay you a penny if they didn't do it. Then on the night before you plan to wash put up a little sign in the dressing room, "Tomorrow is strip day," and have each bring down his sheets when he comes instead of making his bed as usual. I should think that would save you a lot of hoofing and it wouldn't inconvenience the kids at all. Dad should be no exception. He can dump his clothes in the hamper on the way to the barn just as easy as pie. Want to try it?

Is there any way a laundry shoot could be built from the bathroom upstairs? We tried to think of a way but there didn't seem to be one.

Lifting Water to and from Washer: We think very strongly that you should try to get a hose with a screw nozzle that will fit the faucet for filling the washer. With a T, a plug, and a short piece of pipe, an extension could be made from the drain in the laundry tubs to extend out horizontally to the edge of the tubs. The hose could fit on this pipe (at a lower level than the washer bottom) and the water will go out by gravity. I'll try here to see what is available in the way of a hose, but you try too.

Lifting and Carrying the Laundry Baskets: A backless chair under the wringer will raise the basket so that you won't have to lift so much. Or an old baby-carriage chassis would support the clothes baskets and would wheel outside or into the hall where the clothes are to be hung up. One of the homemaking magazines has suggestions for making carts like that, and they will supply directions upon request.

Pump: All we can suggest is that the pump be dismantled and sold, and the proceeds go for fixing up the rest of the laundry. If the pump itself is not at fault, it should be sold as a pump, for they are scarce, otherwise as scrap. Since it has never been used, it seems silly to have it taking up money and space.

Storage of Equipment and Supplies: Either the pump shelf or another shelf on that wall between the kitchen window and the door seems more convenient to store the soap, etc.; or could you put the bluing and soap in the machine before you move it, so reducing the number of steps? The clothes baskets and mangle will go nicely under the sorting space, and a shelf above it would give a lot more room. Maybe the space where the hamper used to be could be used to hang Dad's dirty overalls.

Well there it is — what do you think? Try out what you think would suit you and let me know soon.

Love,
Sal.

Dear Sal,

Cold: Canvas gloves O.K.? Why knitted? Used heater for the first time Monday — swell. I like to freeze some of the clothes — bleaches them. I'll try the house drying plan but I'll hate it. I'll use the living room instead of the hall, and probably they won't dry there because of cold, lack of breeze and sunshine. Attic is no good for that reason.

Sorting Space: L table. (Crates too low and unsightly. Remember this is my rear entry, main thoroughfare of traffic in a country home.) That's why I wanted drop shelves and also because the passageway is too narrow between the pump and shelf corner for everyday safety. I'm tickled with the removable hamper lining. Why not just a canvas bag hung from hooks above the surface? Laundry shoot impractical unless built in, I think, but Dad suggests a duplicate canvas bag for upstairs in which everything could be just rolled downstairs and dragged out to the laundry. The kids haven't too much time in the morning, and I really don't need that much help unless I age considerably.

Lifting Baskets: I see they have a canvas basket on stilted wheels in the sale catalogue for $1.67 or sumpin, but it looks frail. I like the stool idea, except that I'd still have to lift the basket out to the porch and put it up on a stool there.

Lifting Water: I agree about the hose and connection, but the one I have won't fit and I don't know if I can buy any now. I'll keep trying, you wouldn't know the size of the faucet. The emptying pipe is already installed, you know. I just couldn't use it on account of the buttons, etc. The same hose connection fits both faucet and drainpipe.

The jar ring and mesh strainer proved NG because it clogged at once with lint and no water at all went through. So today I bought a metal disk full of holes for ten cents. It is convex and has prongs to fit in the drainage hole. This too will probably clog, but can be cleaned off without removing from its place. Maybe it could be left in permanently.

Pump: Dad says he will take it out and keep it for use somewhere else on the water system.

Shelves: Guess I'll have to put a corner closet behind the door for the present closet junk (preserving kettles, bats, balls, mitts, raincoats, rubbers). Then I could have a long shelf over the kitchen window for laundry supplies — no, that would be a "glory hole" too. Guess a small box on the pump itself or just above, where the pump shelf comes down, would be better for the things I keep on the top of the water heater. Anywhere within reach as it is now. I'd leave the machine and baskets where they are, maybe, unless I have them in the corner in front of the L drop shelves.

Love,
Mom.

In her accompanying note Mother said, "Incidentally, you did a swell job on your laundry problem. Some of it I can use." It has certainly given me something tangible to work with and plan — a grand opportunity to practice home management and see it work. It has made me realize what a good manager Mother is, and helped to evaluate her homemaking in relation to my own standards for homemaking in the future. The true results will not appear until the changes have been made in the laundry at home and have proved successful — or even later, when I have a home of my own and my own laundry problems will be solved more easily and effectively because of this experience.

After the summer vacation Sal wrote back to her classmates:

Dear Classmates in Ec. H.,

I have just finished my first laundry, a week's wash for a family of eight, in two hours flat! Am I proud. But to be perfectly frank about it, I'm sure I never could have been so speedy if it hadn't been for the laundry problem we worked on last fall. Do you remember our lab when we discussed Mother's laundry problem and its possible solutions? I thought perhaps you would be interested in hearing what had been done at home and how it worked out.

The "cold weather" solutions still haven't been tried — probably next fall will be their turn. The sorting space was the first problem we tackled, because it was Mother's brainchild. We moved out the wardrobe and knocked it apart. One long side was just right for a sorting shelf, and as that would leave the L length too small to be practical, we put up just the long shelf on the end wall. It is fastened to the wall by hinges and braced with removable 2-by-4-inch boards. When the laundry is finished, Mother removes the braces and the shelf drops against the wall, leaving more floor space for everyday use. We found that the shelf is ideal for sprinkling the clothes too, and for preparing vegetables for canning or freezing. It holds about four piles of dirty clothes and eliminates all the bending involved in sorting clothes on the floor. The feed bag lining for the clothes hamper is being made, also a lining for the hamper in the upstairs bathroom.

The children cooperate in gathering the dirty clothes. Each child collects his own dirty clothes and leaves them in the bathroom. Mother strips the beds and leaves a clean sheet for the children who make their beds later. This saves Mother valuable time and effort.

The lifting solution has been probably the most satisfactory. We use the old hose with a screw nozzle purchased in a hardware store. The nozzle fits on both the faucet of the laundry tubs and the washing machine outlet. It has simplified the filling and emptying of the washer to the "nth" degree, and has eliminated all the backstrain of lifting those heavy pails of water. A perforated metal plate which fits into the washer drain has taken the place of my can-rubber and gauze invention, and prevents buttons and string from clogging the hose.

A stool placed by the second rinse tub raises the laundry basket to hand height. A crate does the same on the back porch by the clothesline. Mother no longer must stoop and bend to pick up the heavy baskets.

The pump was removed one day by the twins. Dad had to assist when the going was tough, but the pump is now stored away. This leaves much more space by the tubs and allows an ample passageway when the sorting shelf is up.

We left the hamper where it was, and the laundry supplies are now stored on a new shelf (made from the closet shelf) in the corner over the hamper. It holds the bluing, soap, and water softener, all in easy reach from the washer, then Mother moves the washer into position and fills it with water. The stool is stored upside down on the water heater. The rubbers and tin cans go in boxes under the laundry tubs. The bats and balls and fishing rods stand in an old wastepaper basket beside the tubs. The laundry baskets hang on hooks above the sorting space, and the pans which were stored in the closet now reside on shelves in the cellarway.

Mother tried out her new laundry and loved it. Washing was so much easier that it was a blessing. Now she washes every week, feeling that she can accomplish both the washing and ironing in one day and still enjoy it. But her change in attitude is more evident in the laundry itself than in her changed routine. Mother covered the laundry tub covers with bright yellow oilcloth, and backed the wall above the tubs with the same yellow. She took down the dingy curtains and pasted a grey-green oilcloth scallop all around the window frame. Now she has a bright and cheery — and convenient — laundry that is a joy to work in — thanks to you.

As ever,
Sal.

SUGGESTIONS FOR DISCUSSION AND INVESTIGATION

1. In your own kitchen, compare the number of motions you use in washing dishes from left to right with those you use in washing them from right to left. What factors influence the number of motions you use? What rearrangement of your dishwashing center would reduce them to the minimum?
2. Consider the cost in time and effort of working out scientifically all the details of a kitchen as compared to the cost in time and effort of using an unhandy kitchen the rest of your life. When is it economy to make a thorough study of your kitchen and to put considerable time, effort, and imagination into making it convenient?
3. Have you home problems that you can work on with your mother by correspondence? Use one of these as a term problem in home management, or for a class problem. Type your report, and leave a carbon copy with the department, as reference reading for the course. Take pictures if possible, and make drawings to illustrate points. If you plan to teach homemaking, your own copy will be a valuable reference for your students.
4. If you have ever done or helped with a family washing, tell of your difficulties and whether you overcame some of them, and if so, how. If you can, make arrangements for your group to visit a homemaker to see her laundry center. Watch her do a washing, or hear her explain how she does it.
5. Borrow a "washing" from a homemaker you know. Divide into small groups so that each person will have a part in doing the washing, with one member in each group to observe and make a flow chart of travel, a list of irritating circumstances, and a count of stoops and stretches. Discuss these observations, and work out a convenient laundry center in your home management laboratory.

CHAPTER 11

A TOUR OF LINCOLN COUNTY

Towards the close of the term a home management class visited in one day six homes, a country church, and the homemaking center of a central high school to study home management in different situations. Kitchens were emphasized in this particular tour because so many of the management problems of the home are centered in the kitchen.

The big red and yellow chartered bus stood waiting at the entrance of the Home Economics Building on a beautiful Saturday morning in May. Thirty-five home management students, singly and in groups, hurried towards it with their lunchboxes under their arms and anticipation in their bearing. They were going to have a quick view of management in eight different situations in near-by Lincoln County.

A home management extension program had been under way in Lincoln County for many years, and this trip was made possible through the cooperation of the Home Demonstration Agent and the state extension specialist in home management. The homes had been selected both because they demonstrated good management and because they differed in size, composition, income, and occupation. The specialist knew these families personally, and had already given the students a realistic and intimate picture of the county and of the families they were to visit.

Lincoln County has no cities, she told them, and approximately 60 per cent of the population is classed as rural. Dairying is the outstanding farming activity, and hay the principal crop. It is low-value land; the average value per acre for land and buildings is $39 while that of the state as a whole is $73. Sixty-eight per cent of the land in the county is in the two poorest land classifications, and almost half of the occupied farms are in these land classes. The students would see a wide variety of situations: families with different interests and values and with varying resources and abilities working towards the successful solution of their particular home management problems. In each of these homes, improvement of work areas had steadily progressed to meet the family's needs; all were striving toward the attainment of the things important to them.

The specialist suggested that the students might understand more clearly the individual nature of home management if they looked for such things as these: (1) the differences in interests and desires of the various families, leading to variations in working conditions; for example, the devices in one home might not be duplicated in another home but might have stimulated an original idea or an adaptation; (2) the sources of information and help and how they were used; (3) the initiative shown by families; (4) the varying degrees of clarity of purpose; (5) the ways in which family members cooperated; (6) the different choices available to the family, what they selected, what they gave up; (7) the limitations and possibilities of each situation; (8) what was learned by family members through experience; (9) the subsequent steps planned by the family.

When the bus started, a mimeographed program of the tour and a brief history of each family was given to each student. These were studied and eagerly discussed. The first visit was to a homemaking center in a high school. A senior student met them at the door of the building and explained that the homemaking teacher was unable to be there. She took them into a large room with two unit kitchens at one end and a living room at the other.

They looked at the kitchen end first. Although at first glance these two unit kitchens seemed exactly alike, as both were provided with identical standard school equipment, closer inspection disproved this. The hostess explained that originally they were alike, but that the girls in her class had found them inconvenient and had suggested that by experimentation and a slight outlay of money and labor they could be improved. The girls had divided into two groups, one group experimenting in one kitchen and one in the other, so that each might work out the arrangement it found most satisfactory. Without copying each other's ideas they studied the motions and the time used in doing their class work, and checked the irritations that arose. At present they were testing whether time, motions, and irritations could be lessened either by rearrangement or by adding conveniences that they could make themselves. Many sources provided ideas: homes they had visited as a part of their class work; exhibits they had seen at the state college; bulletins, books, and magazines; and last but not least, their own heads. They had been allowed to go ahead on their own initiative and responsibility and had made their own decisions. It had been, she said, fun. The teacher had helped them when they needed help, and the shop-work boys had built some of the equipment for them. They themselves had the privilege of using the shop and the tools, and she pointed with pride to the files and the movable racks and shelves they had made to increase the convenience of cupboards. They were not yet through with their experimenting. One group, for instance, was trying out supplies in a certain part of the baking center while the other group tested them in a different location.

This project was additionally interesting because both the advanced and the elementary classes were working on it. When the elementary foods class used the kitchen, the girls reported back to the advanced class what they found especially convenient or inconvenient; then the advanced class considered these suggestions and experimented further. The college students appreciated the value of such cooperation, as it seemed more constructive than the common practice of competition. Some of the high school girls had become so interested that they had experimented in their own kitchens; the senior student told of the conveniences she had made for hers.

As they went on to the home of Mr. and Mrs. Hampden, the low country fell away as the bus wound up a steep narrow hill road. The Hampdens seemed to live on top of the earth. On all sides one could look over the tops of green hills. The sky was very blue and the mustard growing in the fields was very yellow.

Mr. and Mrs. Hampden and the hired man comprised this household, and at times Mrs. Hampden's mother made her home there. Mrs. Hampden was an active member of her local Home Bureau and three years before, as home management leader, had taught the lessons of the study course, "Overcoming Fatigue." As a result of this work and of a management conference held in her home several years before, she had made many improvements in her kitchen. Most of these were small contrivances made at small expense, but the sum of them made an impressive array of labor-saving devices.

Mrs. Hampden met the girls at the porch door and led them into a combination dining and living room. The outstanding feature in this room was a large handmade chest with small drawers and cupboards beneath, which formed the wall of the dining room next to the kitchen door and opened into both rooms. Mrs. Hampden explained that she kept linen, silver, and the like in some of these drawers. She and Mr. Hampden each had one for their own things; another was filled with children's playthings for the use of young visitors, who, she said, came frequently; the hired "man," a lad of seventeen, "who was just like one of the family," had another. In the cupboard space below the drawers she kept pies, cakes, and other desserts to save travel to the kitchen.

Mrs. Hampden called attention to the table cover. It was made from a feed bag with a woven stripe, and was fringed on the edges. She said Mr. Hampden liked to sit at the table to work on his farm records and always pushed back the tablecloth and mussed it. So instead of trying to make over her husband she had made a tablecloth which was good looking and which did not crumple. At present they — including the hired man — were reading histories of the countries at war, and the hired man had improvised a place for these books from a washstand and an old bookcase.

Their main idea in the kitchen had been to lessen the fatigue and confusion of the many different jobs done there. The old kitchen cabinet was too low to mix at comfortably, so they had separated it and fastened the top section over the sink for a cupboard and placed the bottom section before the window at the left of the sink. She found it to be a better height than the sink for washing dishes. In addition, it left the sink free for the men to wash in. Her mother, who was shorter than she, used it as a mixing center, and the breadboard that pulled out at the side was of a convenient height to sit at and work. For her own mixing, she had picked up a second-hand kitchen cabinet for $10 that was higher than the old one, and this they had placed at the left. She was especially conscious of working heights in relation to comfort, and this arrangement gave her and her mother four different heights at which to work.

Many conveniences in the kitchen were planned to save steps. Shelves in the chimney cupboard held supplies used at the stove; a second-hand washstand contained towels and cleaning supplies; the covered woodbox, large enough for a one-day supply of wood, was fitted with wheels so that it could be easily pushed to the back room for filling; the scrubbing pail was set into a truck made from the cover of a cheese box fitted with casters; and mending was left in a half-bushel basket that could be easily carried around. These things told better than words of intelligent use of resources on hand, and spoke volumes for the originality and enterprise of the family. They learned, too, from Mr. Hampden that a pasture yellow with mustard may be beautiful to the eye of a student but not to the eye of a farmer.

The girls were eager to visit the Inglebys because one of the daughters was a freshman at college. The Inglebys lived on one of the better classes of land in the county and operated a three-hundred-acre dairy farm. There were five in the household at the moment: Mr. and Mrs. Ingleby, the grandfather, and two sons. Two daughters and another son were away from home, though one daughter came home every week-end.

Mrs. Ingleby explained that originally the rooms in their house, with the exception of the kitchen, were very small and that the kitchen lacked many conveniences. With so large a family she had found her work difficult, and it was obvious that as the children grew older the burden of the inconvenient house would increase. So for five years they planned on paper, and when finally they could afford to remodel they knew pretty well what they wanted.

The original kitchen, now the dining room, had been too large and most inconvenient. There were not enough cupboards; the stove was across the room from the sink; the refrigerator had to be kept in the pantry, a tedious journey; outdoor wraps had to be hung in the kitchen; and the men had to use the sink for washing up, which was annoying both to herself and to them. The living room, on the other hand, was too small to accommodate all of them comfortably at one time. To remedy this, they enlarged the living room by opening a wide archway between it and the old dining room, converted the old kitchen into a dining room, built on a new kitchen with a lavatory for the men, and set aside the old pantry for the men's work clothes.

The main idea in the kitchen had been to save steps and to make it possible for several persons to work at one time without getting in each other's way. Two or three could wash dishes at one time. The sink was located on the wall next to the dining room, and the cupboards on each side of it opened both into the kitchen and the dining room so that clean dishes could be put there for setting the table and soiled dishes could be pushed through to the counter at the right of the sink. Over the sink was a cupboard narrow enough so that heads would not be bumped on it and dishes could be stored in it without wasting space. There was plenty of cupboard space in this new kitchen. One cupboard had a back of wire screening separating it from the cellarway, and here Mrs. Ingleby set hot foods to cool and stored others that needed to be kept cool but did not need refrigeration. The refrigerator had been moved from the old pantry into the kitchen, and placed on a platform to save stooping. The men hung their working clothes in the storeroom (the old pantry) and washed up at the lavatory. They wanted a laundry room but could not afford to build one, and so they had put the stationary tubs at the end of the kitchen under a big window opening on a beautiful view. Mrs. Ingleby said she had been glad many times that they had done this, for the tubs provided an excellent place to wash eggs and a cover over the tubs when they were not in use made a good work surface. The whole atmosphere of this kitchen was light, cheerful, and inviting. The departing visitors took with them a happy sense of a united family working together.

The country church was the next and the most appropriate stop, because it was lunch time. The students were greeted by members of the Ladies Aid Society and invited into a light cheerful dining room set with tables protected by colored paper napkins and decorated with spring flowers. Here they ate their lunches, and the women served them coffee. After lunch they went to see the new kitchen made possible by the generosity of a parishioner. The church had called upon the state college for help in planning it, and a staff member from the department of institution management had met in the room with a group of men and women of the church. They had planned the kitchen to serve their church and their community, and the men had done practically all of the carpentry work.

Many of the students had worked in church kitchens in their own communities, helping to prepare church dinners and banquets for large community gatherings. Some of them expressed no pleasant memories of these occasions, remembering only the stifling heat and the confusion in which they had to work, and the fatigue and aching feet they took home. They were delighted, therefore, to see a light airy room from which hot appetizing meals could be served easily and quickly. Stoves and sink were at opposite ends of the room, so that hot food could be passed to the waitresses at one end of the counter between the dining room and kitchen, and soiled dishes passed through to the sink at the other end. This avoided both the crowding of waitresses in the kitchen and cross traffic in the dining room.

The home of Mr. and Mrs. Jackson was more than a hundred years old, and had been in the Jackson family since it was built. Mrs. Jackson said she had lived there for the thirty years since they were married. At this time the family consisted of herself, her husband, and a son who helped operate the farm.

The house, Mrs. Jackson explained to the students, was very dark and dismal when she had first moved in. The woodwork was dark cherry and the walls were covered with dingy paper. Since light was important to her, she promptly painted the woodwork white and put light paper on the walls. She had extra windows installed. The living room windows were all on one side, and as these were shaded by a porch she had left them uncurtained. People thought she was queer, Mrs. Jackson said, because she did not have curtains, but it was her home and she was going to have it the way she wanted it, regardless. She wanted light, she liked the graceful lines of the window frames, and it saved money and work. Window shades gave all the protection needed.

Mrs. Jackson had made improvements slowly "because it took time to think things through." She needed another cupboard with counter space in her kitchen, but in the most convenient place it would extend out a few inches in front of the pantry door. While this would not bother her in her work, if she ever got the new refrigerator that she wanted for the pantry it never could be moved in — nor could the old one be moved out — with this projection in the doorway. However, she was going to have her cupboard. She could fasten the upper shelves on the wall, since they would not interfere with the doorway, and then either use a drop-leaf for a counter or have a base cabinet fitted with casters so it could be rolled away. She was making up her mind which to have. She herself had covered the pantry shelves and the sink counters with linoleum, which was more durable and easier to keep clean than paint or oilcloth. On one shelf were wire racks to protect the linoleum from hot dishes; they had come from an old refrigerator.

Mrs. Jackson said there was no such word as "can't." For example, she wanted the window in front of the sink turned sideways to make the kitchen lighter and airier, but the local carpenter said, "It can't be done." She pointed dramatically to the window over the sink. It was turned sideways. Now she was turning another problem over in her head. There were too many doors in the kitchen. One that opened off the dining room was unnecessary and she was thinking of closing it off. But she was still thinking it over. "I don't want to be homesick for that door all the rest of my life."

Probably no home visited made a deeper impression on the students than did that of Mr. and Mrs. Karl. The Karls had been in this country thirty years and had ten children, six of whom were at home.

Mr. Karl's brother had come over from Germany before them and settled in Wisconsin. He had written back such glowing accounts of the rich farm lands there that the Karls decided to try their luck in this new country. Their first jolt came, she said, when they learned that the Wisconsin farms cost far more than they were able to pay. So for about six years Mr. Karl was employed as a tenant farmer and during that time five of their children were born. But they never gave up the idea of owning their own farm, and at the end of these six years Mr. Karl consulted a land agency and learned that he could buy a farm in Lincoln County in New York State for a price within his means. So they made the purchase, packed up their worldly goods, and with their five children set out for the spot that would be their home, probably, for the rest of their lives. When they reached their destination they discovered that their farm was poor land, covered with stones. This was a hard blow.

Mrs. Karl told of their struggles. The first two years they had no water, and some of their cattle had died. Their first crop had been mostly devil's paintbrush. The third year, however, Mr. Karl discovered a spring on one of the hills, and piped the water to the barn.

The house was badly in need of repair, but Mrs. Karl decided that she had better work with him on the farm until they could get it on a paying basis, and let the house go. The children took care of each other while she was in the field and helped with whatever work they could do. They ate what they produced, prepared it in the easiest way, and managed to get along. Mrs. Karl said that at one time they had only three cents in the house for six weeks. For these six weeks they lived off the farm. Then Mr. Karl and one of the boys went to town to get the milk check and bring home something appetizingly new to eat. She was so tired and hungry that she went to bed. At last the men arrived, only to say that the milk check had not come and they had no new provisions. So she got up, killed and boiled a precious chicken, and made some biscuits. Indeed, the Karls had an unusual way of turning their bad times into festive occasions. "When times were hardest," said Mrs. Karl, "and I could see that Mr. Karl was feeling blue, I would bake some special cookies and make some cocoa and we would have a party."

As the years passed the farm improved and became a productive dairy farm, and the family increased to twelve. The house was in urgent need of repairs. The roof leaked, the floors sagged, and the plaster was falling off. The rooms were small and increasingly inconvenient as the family grew in size and age. For many years the Karls worked together on plans for improvements, but they lacked the wherewithal. Not until three years before this visit did they decide that they could use their small savings, and with strength and ingenuity put their plans into effect. Hazel and her younger sister Jane were present at this meeting and helped their mother explain the improvements they had made. The first and most important step was to install running water in the house. The leaky roof was mended next. Then came the fascinating task of removing partitions, of painting and decorating, and of installing labor-saving equipment.

The enthusiasm with which Mrs. Karl and the girls related their experiences expressed clearly the fun and excitement all this had given them. Mrs. Karl told with a sparkle in her eye of the day when the men went to town for lumber. Hazel was so impatient to get started that she tore down part of the partition between the small living room and the former kitchen while the men were gone. All the family worked on the enterprise. They combined the old kitchen with the dining room, converted the back room into a kitchen, and made the pantry into a combination bathroom and catch-all. A chimney in the living room was torn down, new floors were laid, the walls were covered with wallboard, and the woodwork was painted by Hazel, who liked to "fix up things." When the oldest daughter came home and saw it, she seemed disappointed that it had been painted dark. Mrs. Karl said, "I always like to have my children pleased, so the next time we used a light paint."

Probably the greatest achievement, and the one that meant the most to Mrs. Karl, was the light airy kitchen with its bright new electric refrigerator, electric oven, washing machine, and mixer — all gifts from her children. At one end of the room, near the stove, was a large woodbox that opened into the kitchen and could be filled from outside. Next to the mixing center was a flour bin that tipped forward at the top; it was big and held a large amount of flour as Mrs. Karl did all her own baking, including her bread. Cupboards opened from the kitchen into the dining room. A light switch in the kitchen turned on the chicken-house lights, thus doing the double duty of making the hens work harder and the family less hard.

The students were spellbound as they listened to the romantic story of how Mr. and Mrs. Karl had achieved this comfortable and convenient American home in a new country, starting with nothing but determination, ability, faith in themselves, and an unwavering picture of what they hoped the future would bring them. It seemed incredible that despite all the work done on this farm the Karls could still make it possible for all their children to have good educations. Hazel and her older sister were trained nurses, and Jane had just finished high school and hoped to take nurse's training. Mrs. Karl showed with understandable pride a photograph of one handsome son who was in the Army, and of another of draft age who expected to be called.

The Karls' achievements, their sincerity, and their rightful pride in their success place them high on the list of New York State families qualified to teach the fundamentals of home management. They would probably be the last family in the world to realize the greatness of their contribution to democratic living. They were not ashamed of their past poverty, they made no apologies. The expressions on the faces of Hazel and Jane as they listened to their mother showed their love and appreciation for all she had done. Her unquenchable spirit was contagious and it greatly boosted the morale of some of the students who were themselves facing severe poverty and struggling hard for their education.

"Mrs. Lyman ought to be named the champion lady carpenter of Lincoln County," wrote one student in her report of this tour. The Lymans lived on a twenty-four-acre farm, and Mrs. Lyman was an active Home Bureau member and management leader in her local unit. In this capacity she had gone on a kitchen management tour several years before in a different county and picked up many ideas she later adapted to her own home.

When she had moved into the house, the kitchen was bare and inconvenient. Undaunted, she set to work with saw, hammer, and nails. An expression of incredulity was stamped on the faces of the students as Mrs. Lyman told in her matter-of-fact way how she had moved a doorway between the kitchen and pantry to provide needed space for equipment; how she had built the cabinet under the sink for additional storage space; how she installed drainboards on each end of the sink; how she had made a rack to raise the dishpan to a more comfortable height in the low sink. When more storage space was needed, she put up narrow shelves behind a door and built cupboards from the old pantry shelves and protected them with oilcloth window shades instead of doors. She liked color in her kitchen, so she had mixed some paints she had on hand and painted the insides of the cupboards. As she pointed out the convenient features of this cheerful, unusual kitchen she explained why each thing was where it was, how it made her work easier, less time-consuming, and more fun. All the improvements had been made, she said, with lumber from the old pantry and from other material on hand. The only cost involved was for a few boards gleaned from a 50-cent load of kindling. Mrs. Lyman was visibly proud of her accomplishments, and it bothered her not at all that her cupboards lacked some of the precision expected of a cabinetmaker's product.

The last stop was made on the home trip a mile and a half from the city of X. It was a small, modern, newly built bungalow perched on a hill that looked down into a green valley and to the blue hills beyond. Mr. and Mrs. Madden and his two sisters lived here. The sisters were in college and were acquainted with some of the visiting students.

One student remarked that a good many girls think that anything new and modern is better than what they have at home. Whether this is true or not, this house gave them a chance to find out that even a brand new house can present difficulties. The house was one of three in a row built to be rented. The Maddens saw it in the blueprint stage, and they recognized some serious inconveniences, especially in the kitchen. The contractor agreed to incorporate any desired changes within reason. Delighted, the Maddens came to the college for help. They laid out the kitchen to scale on the laboratory floor and experimented with equipment in different positions. They finally arrived at a plan that suited them and was also satisfactory to the contractor. It was chosen on the basis of convenience for the number of persons who would work in the kitchen at one time.

In the original plans the hot-air register was in the only logical place for the refrigerator, the cupboards were inadequate, and there was no space for eating in the kitchen. To overcome these inconveniences, an insulated box about 6 inches high with the register in the front was placed over the hot-air outlet, and the refrigerator was placed on this box. At this height the refrigerator was so convenient that it more than made up for any slight additional cost for electricity due to warm air from the register entering it when the door was open. Then a "snack bar" to accommodate two was built in the space planned for the refrigerator. The Maddens found this especially convenient for breakfasts, since they all ate at different times. Extra cupboards were built, and Mr. Madden made racks, half-shelves, and files to provide the best use of all available cupboard space. One counter by the sink was lower than the other to provide two working heights for different tasks. Under the sink Mr. Madden had made a chute for tin cans by cutting and hinging a section of the floor so that it could be lifted with the foot. In the basement, covering this hole, was a burlap bag that could be removed and emptied when full. But when everything was arranged to their utmost satisfaction, Mr. Madden secured a position in another part of the state.

This was the last stop on the trip.

COMMENTS OF STUDENTS AFTER THE TOUR OF LINCOLN COUNTY

In all of these homes it was evident that the material things, the immediate goals, are only means to an end. While these ends may have differed slightly in some of the homes, they seemed in all homes to be happiness, health, and satisfaction of the whole family. The wants and desires of all family members were considered in the planning. For if the material things — so-called improvements — do nothing to make the family happier, healthier, or more satisfied, something has been wrong with the planning.

Although the tour consisted mainly of visiting and discussing kitchens, I learned much by just listening to the explanations, because the philosophy of living was almost certain to be expressed in some way. It wasn't so much the kitchens that were important, but the fact that these women used what they had and got what they could of what they needed.

What really made this tour so valuable was seeing these women in relation to each other, observing that even though each situation is different and each income is different, there is still a fundamental sameness in what each woman does. This is sometimes lost when our visits to the different homes are widely separated in time.

Each person mentioned has seen that what she had was not perfect for her, but she has mobilized what she had or could get to make changes that would improve her situation. The perfect solution is not obtained, but attempts at improvement are continuous. This is progress and good management.

It seemed particularly beneficial to be able to see, all in one day, kitchens in rural and city homes, in a church, and in a high school homemaking department, and to compare management in food preparation and other kitchen work among groups of different sizes, training, and ages. Through all the repairs and "newnesses" that filled each kitchen, there appeared a genuine spirit of interest in management *with* utensils and arrangements rather than the purely childlike enjoyment many women find in attractive equipment. There was sincere appreciation of household labor and its organization, and careful experimentation and planning were evident.

SUGGESTIONS FOR DISCUSSION AND INVESTIGATION

1. List what you consider to be the value of this tour to the students, to the families visited, and to the instructor. Of what value has the report been to you?
2. Discuss the important values in each of these homes, the material and human resources, the ways these resources were used, and the satisfactions gained. Determine to what extent the same management procedure was followed by all of them.

3. Consider examples of good management in the homes of your acquaintances that would warrant inclusion of these homes in a similar tour. Why do you consider these to be examples of good management? How would you organize such a tour, especially if busses were not available? What would make such a tour of particular value to students who plan to teach home management?
4. What determines the value of things that are not used in a home? What things in your home have less relative value? What things have more? What might change the value of these things? How has the war affected the value of things?
5. Find out whether any of the counties in your state have been surveyed for land classification. What is your reaction to the policy of having the government buy up poor farms and move the families to more profitable farms? How could the government use this poor farm land? Discuss whether this is (1) good management from the standpoint of the country as a whole, (2) from that of the individual families directly affected.
6. What investigations ought a family to make before buying a farm?
7. What is the purpose of a school homemaking department? By what should its success be judged? How did the students in the school described in this chapter overcome the restrictions set by standardized equipment and make this effort a means towards better management in their homes?
8. Discuss the proverb, "Necessity is the mother of invention," in connection with the clever inventions seen on this tour. How might manufacturers of household equipment benefit by the creative ability of such families?
9. Discuss the common problem of getting carpenters, plumbers, and other workmen to follow the homemaker's wishes instead of adhering to their own standards.
10. Discuss the value to women of being self-sufficient with tools.
11. Contrast houses built to rent with those planned around the needs and desires of individual families. Cite specific ways in which flexibility and adjustability in houses built to rent might help them meet individual needs. What must home economics teachers, students, and homemakers know about the problems of designers and builders so that they may work intelligently with them for more flexible houses?
12. Visit a low-cost housing project. How can the working areas be adjusted to the needs of different families? Could this have been done without increasing the cost?

CHAPTER 12

THE MERRIVALE NEIGHBORHOOD MANAGES IN WARTIME

During the war, with tires and gas rationed, all-day tours to neighboring counties are taboo. The home management class met this problem by touring a small community within two and a half miles of the college. The procedure was similar to that described in "A Tour of Lincoln County," but because the community was so much of a unit, with similar background, tastes, and professions, the picture of each family as it was given to the students will, for the sake of brevity, not be repeated here.

Seven years before this tour, the little neighborhood on Merrivale Road did not exist. There was a farm and farmhouse, and a one-room country school. The function of the school had long since ceased to exist; the school bus used it for a garage, and once a year it served as a voting booth; otherwise, weeds and roadside lilies grew undisturbed under the tall willows that shaded the once hard-packed playground.

Then young Whitney Neilson, a teacher at X college, and his wife Margaret bought part of the farm and sold off parcels of the land to friends who thought as he did. Whitney Neilson's father had become nationally known as an agricultural economist, and Whitney and his young colleagues at the college were working in the same field. They chose to make homes on the open land outside the city. Since they were professional people, their small "farms" had to be their avocation, an expression of their deep convictions and their nostalgic feelings rather than remunerative agricultural ventures. Six new homes were built on and around the land Whitney bought. The school was converted into a small home. The older of the eighteen children who lived in the community played together and went to the same school. The contribution to the community that Whitney Neilson made, unconscious at that time of its importance, was not lost on the home management students who visited this group of homes. Nor did they fail to see how much work these people were doing indoors and out, with the usual help unobtainable. The garden acreage was increased so that all the food possible could be raised and preserved in cans and bins. The community formed a car pool. The older children organized a 4–H club; on certain days the older girls "tended" the little children to give the mothers a chance to shop.

Both Whitney and Margaret Neilson had graduate degrees from the state college at X. They were married as soon as Whitney received his doctor's degree. Two years later, Mr. Neilson accepted an instructorship in the state college, and they rented a small apartment in a little village about six miles from X. Here they lived for two years, and here Barbara was born. All the time, however, they were looking forward to a larger home nearer Mr. Neilson's work. They considered four possibilities: they could rent a larger apartment, rent a house, buy an old house and fix it up, or buy land and build. They finally decided that as a permanent venture they wanted to own a home large enough to provide play space for the children and with enough good land to grow vegetables and fruit for summer and winter use. Buying would give them such a home, would cost little more than renting, and they would have a permanent investment. If they rented they would still pay indirectly the "Dirti Five": depreciation, interest, repairs, taxes, and insurance. So first they looked at old houses; only to find that remodeling would cost as much, if not more, than a new house, and in the end it would be an old house and they had no sentimental feelings for old houses as such. Then, too, all the old houses available had some drawback: too far from Mr. Neilson's work, poor neighborhood, poor land, poor view, inaccessibility to a good school. Therefore they decided to buy a lot and build.

They looked at lots; no site pleased them except half of a farm owned by the country club and across from it. They had to buy the entire forty-seven acres or nothing. If they bought it, three choices were open to them: they could keep all of the land and save until they could afford to build, renting in the meantime; they could keep all the land and borrow to build; they could sell off some lots to supplement a building loan, build a house, and rent rooms to pay the mortgage. They made the third choice. They bought the farm with their combined savings, paying $4800 in cash. Almost before the transaction was completed one lot was sold and the rental of a suite of two upstairs rooms was contracted for. Two other lots went promptly, followed by a fourth. When, four years later, the last saleable lot was sold, all but $220 of the $4800 had been recouped by these sales. Mr. Neilson kept thirteen acres, which thus cost him only $220, apart from a small sum for taxes paid on a portion of the land before it was sold. By following this procedure the Neilsons were able to place desirable building restrictions on the lots and to choose their neighbors. To prevent any future uncertainties, each lot was measured and staked out with permanent markers, and an abstract was traced by a lawyer before the deed was signed. The $30 fee for this service was small when compared to the security it gave to both buyer and seller.

Planning the house was the next step. They secured the services of a reliable architect, but they did not hurry their plans. They took time to deliberate over the style of house they wanted, what they could afford to spend, and the most durable kind of construction. They considered exposures, the number of rooms needed, and the arrangement and sizes of these rooms. About one thing there was no argument: the house had to be sufficiently large and sufficiently flexible to meet the needs of a growing family. Nor was there any question as to where the house should stand: it must be at the top of the hill, overlooking a small creek and a far stretch of fields and hills and pine woods. Mrs. Neilson made most of these decisions, since she was the person most concerned. Mr. Neilson's only specification was for a garage in the cellar. She looked at houses, studied house plans, and planned on cross-section paper; she consulted the architect; she "lived" with the plan awhile, then planned again. It was time well spent. Mrs. Neilson said that after living in the house for six years and with two additional members in the family, she still would not make any major changes.

They decided upon a rectangular colonial-type house as most economical to build and most suitable for their lot. On the first floor are a living room, dining room, kitchen, study, laundry, lavatory and toilet, and closets — ample closets — for cleaning equipment and outdoor wraps. Since Mrs. Neilson felt that a dining room was used only about three hours a day, she made this room large enough to be a playroom for the children. A two-car garage is on the basement level. On the second floor are four bedrooms with a clothes closet in each, two bathrooms, and linen and cleaning closets off the hall. The attic is unfinished and used for storage only; a pulldown trap door provides access to this. Theoretically, the living rooms should overlook the choicest view, but in this instance that would be north. It seemed important to have sunny living rooms, especially as the winters were long and the house was exposed to the north winds. So they compromised, and had a house with two fronts. The living rooms face south where the view is not so good, and a stone-paved porch on the north of the house overlooks the best view. The building contract was put out to bid; the one accepted was an over-all contract which included subcontracts for plumbing and wiring, but a separate contract was made for gas heating. The Neilsons kept an accurate record of all costs, and this record was helpful to some of their neighbors. As there were then only three in the family, they rented to Miss Sayre, a college teacher, two unfurnished bedrooms, a bath, and garage space for $30 a month with heat and electricity. Miss Sayre stayed four years, as long as the Neilsons could spare the rooms.

For the sake of symmetry the house has a front door facing the road, but it is seldom used. The driveway skirts the side of the house, and the wide north porch with its view inevitably attracts the family as well as the visitor to the "back" door. This in fact increases the protection to the family privacy, as this door opens into a hall which leads to the living room, to Mr. Neilson's original study, to the laundry room, to the lavatory, to the closet for outdoor wraps, to the kitchen, to the garage, and to the stairs. The children can come in and take off their outdoor wraps and wash up, and Miss Sayre and Mr. Neilson can slip into their own rooms without disturbing any one else in the process. The garage door is the real "back door." Garbage and trash are burned in the incinerator in the garage. It is also a workshop, as Mr. Neilson built a workbench between the two garages (Fig. 68). When Miss Sayre vacated the garage, Dick acquired a workshop of his own next to his father's.

The home is now almost paid for. When the bank loan at 5 per cent was nearly paid off, Mr. Neilson borrowed money at 4 per cent from members of his family and closed his accounts with the bank. This had a double advantage: it reduced his own interest rate and provided a higher return for his family than they could get elsewhere. Mr. Neilson considers that their land is worked with a profit on the

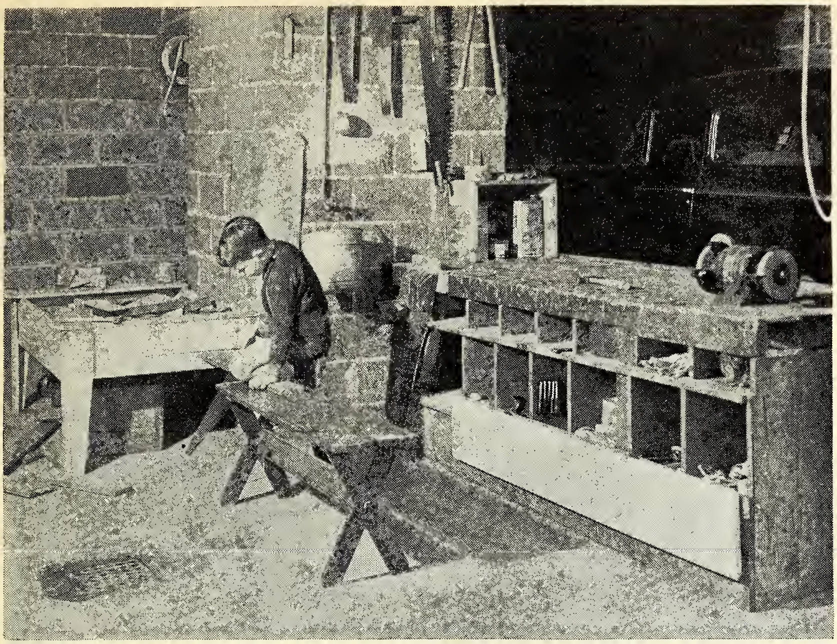


FIG. 68. Mr. Neilson's workbench is between the two garages. When Dick received a tool chest for Christmas, Nr. Neilson converted a sandbox into a workbench for him.

food it produces. But were it not, it would still be a good investment. Gardening is his hobby, his "golf"; his wife is happiest with "land about her"; his children have room to grow up in and responsibilities to grow up to. He claims that the place has its psychological value also, since it constantly confronts him with problems that can be solved, whereas many problems in everyday life cannot be solved. Mrs. Neilson hires help when she needs it and can get it. When she hired assistance to can the produce from the garden she admitted that it was not good economy, but she said: "The garden is Whitney's hobby. He likes to know that we are living off our garden, and so I would do it even if it were not as important to save food as it is now."

Mrs. Neilson is an efficient housekeeper, perhaps because she looks at housework objectively. She does it for a purpose, not as an end in itself. Her guiding principle seems to be "what is best for the family?" not "what will the neighbors think?" or "what do the books say?" The very location of the rooms tends to reduce her work to the minimum and prevents many of the frictions that other conscientious but

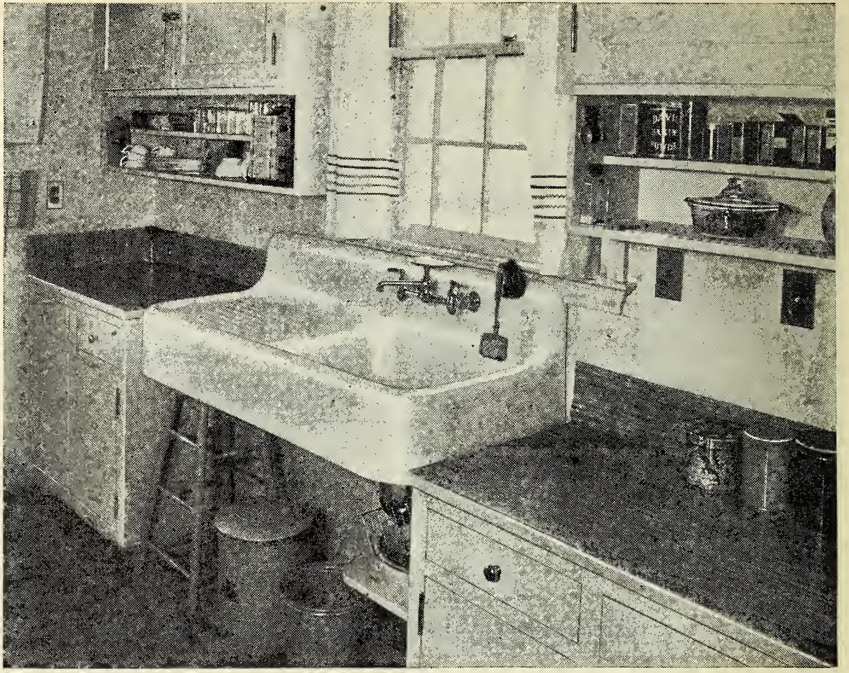


FIG. 69. The right counter is low to bring Mrs. Neilson's hands above the mixing bowls to the most restful height. The doors of the upper cupboards are above her head; the narrow open shelves below hold the smaller things that are used frequently.

less far-seeing homemakers experience. For example, the kitchen is located so that the windows overlook the place best suited for the children's playground as well as the Overmans' house, where the children frequently play, and the vegetable and flower gardens. The dining-playroom is also a great labor saver. There the children have their play corner with blackboard, small table and chairs, and shelves for toys. It solves the problem all mothers face, that children like to play near mother. Now, as she works in the kitchen, they can keep an eye on her and she can keep an eye on them. Naturally the arrangement has its drawbacks, for the care of little children has its wearisome and annoying moments. One day a neighbor dropped in and found Mrs. Neilson hurrying to get dinner. The children's playthings were on the dining room floor in her way as she worked. So she stopped and picked them up, saying ruefully, "I learned in college that you should teach your children to pick up their own toys. But there are times when it seems better management to do it myself."

The kitchen took more study and experimenting than any other one room. Mrs. Neilson went to the college and tested different arrangements and working heights with full-size cardboard equipment in the laboratory. She put her sink in front of the window, with counters and cupboards on both sides (Figs. 69, 70). Since upper cupboards always made her feel as if she were going to bump her head, she placed hers unusually high and had narrow open shelves below them. She bought a stove with a high-set oven, because it minimizes bending and lifting. A table in the kitchen serves as a supplementary work center as well as for family breakfasts and often for her own and the children's lunches. She always uses a service cart when she serves in the dining room. Barbara dries the dishes.

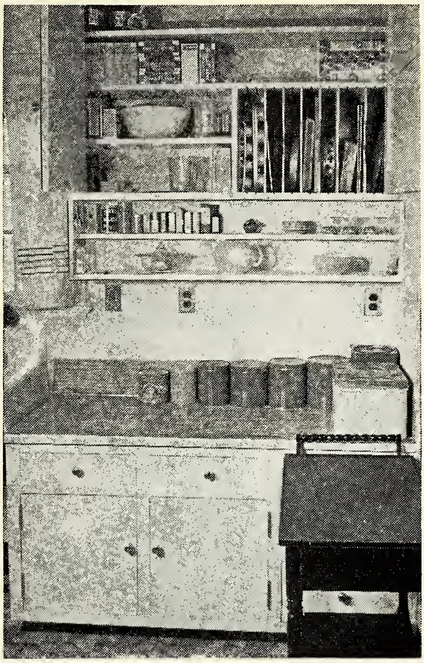
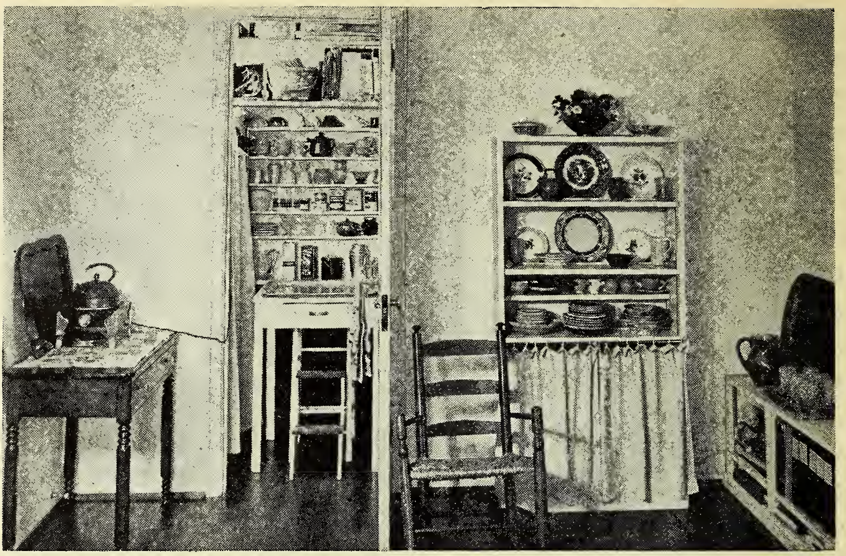


FIG. 70. Mrs. Neilson regrets that she did not put the pan-file at the top and thus double the intermediate shelf space while keeping the pans within easy reach. The service wagon is conveniently near the door leading to the dining room at the right.

The laundry on the first floor also simplifies Mrs. Neilson's work. The clothes dryer is on the lawn near the back door, and the clothes do not have to be carried up or down stairs. Mrs. Neilson told how she bathed the babies in the laundry. She placed the baby's bathtub in the right-hand laundry tub on a rack that brought it to the rim of the tub, and on the other tub she placed a padded board on which to dry him. This saved a trip upstairs, and again allowed her to "keep an eye" on the older children. She kept a small locker in the laundry room for the baby's clothes and bath equipment. She does her ironing in the dining room, as it is large and airy and the children's play makes a pleasant distraction.

With the passage of time and the arrival of Dick and Patty, Mr.



FIGS. 71 (above), 72. In her two-room suite, Miss Sayre converted a clothes closet into a kitchenette. The curtain at the left in the closet conceals dust mop, broom, carpet sweeper, and ironing board, and the shelf above holds the hand vacuum cleaner and a basket of cleaning supplies. Table silver and dish towels are kept in the stand at the left. Behind the table in the closet are two cardtables that make a guest table. Careful measuring and long search resulted in a table that fitted the closet space and a step-stool that fitted into the space under the table.

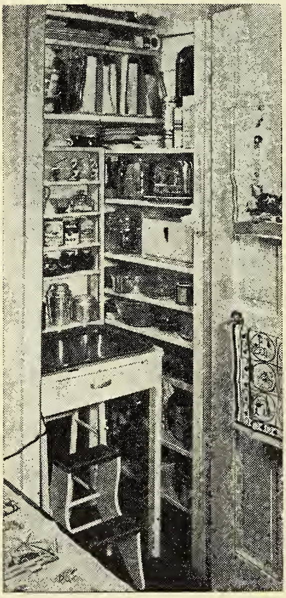


FIG. 72.

Neilson's study on the first floor suffered trespass and finally succumbed to squatter's rights. First, it turned out to be a perfect drying room for the baby's clothes in the winter (which were, in theory, dry and whisked out of sight by the time he returned in the evening). Next, as Dick grew into Barbara's playthings, a desk for Barbara's books and choicest toys was slipped into one corner. It began to seem like the story of the camel's nose; so when Miss Sayre moved out, Mr. Neilson transferred his study into her former bedroom — and Mrs. Neilson now has the study for a sewing room.

While this move of Mr. Neilson's goes to prove that people as well as houses are more valuable when they are adaptable, Mr. Neilson did not suffer by the change. Miss Sayre had two of the best rooms in the house, looking south, west, and north. She moved into the house the spring that it was finished. There was only Barbara then, three and a half years old. She used the large south bedroom for a living room, and converted the clothes closet into a tiny kitchenette with room at one side for her cleaning equipment (Figs. 71, 72). An electric grill on a table at the left of this kitchenette and an open dish cupboard at the right provided adequate facilities for preparing breakfasts and lunches. Dishes were washed in the bathroom in a dishpan that exactly fitted into the lavatory, or sometimes dishpans of water were carried into the living room and Barbara helped. She liked to dry the "tin things" for Miss Sayre, whereas it was no fun to

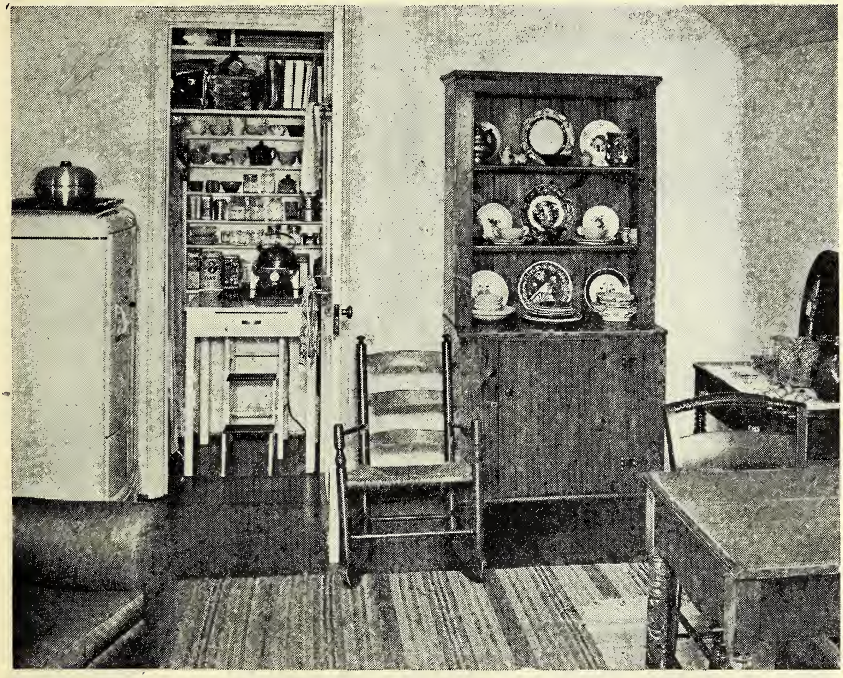


FIG. 73. Compare with Fig. 71. The refrigerator made it possible for Miss Sayre to get all her meals in her room. The red tray and the biscuit warmer divert the eye and make the refrigerator relatively inconspicuous. The shelves formerly in the right corner were put under a low bookcase across the room. The table, at right angles to the south window overlooking the hills, serves both as dining table and as desk.

do her mother's, for — she said with disgust — they had nothing but a sink to wash dishes in. In anticipation of building, Miss Sayre during her last year in the house bought a small electric refrigerator and an old pine dish cupboard (Fig. 73), and the former dish cupboard replaced a dingy dark oak bookcase.

To expedite the getting-up process in the morning, Miss Sayre made a dressing center in the bedroom by the closet, with needle, thread, scissors, and thimble handy on the closet door so that she could catch up a rip or sew on a button in no time (Fig. 74). By

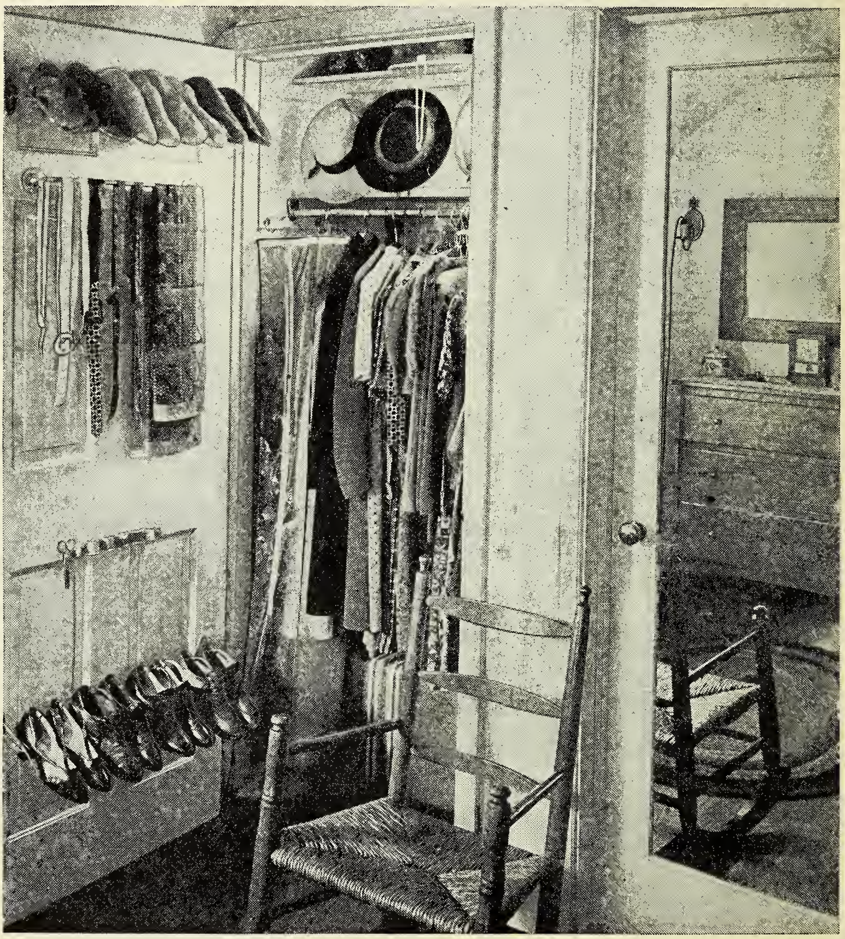


FIG. 74. Miss Sayre's dressing center. Behind the mirrored door at the right is the bathroom. By using flexible hat trees, with cords attached, she can pull her hats down within reach. Sewing equipment to catch up an unexpected rip is on the door.

nailing cleats along the inside of each dresser drawer, she was able to use paper boxes as trays, two deep; the top ones, which hold articles most in use, slide back and forth and make the contents of a lower tray accessible (Fig. 75).

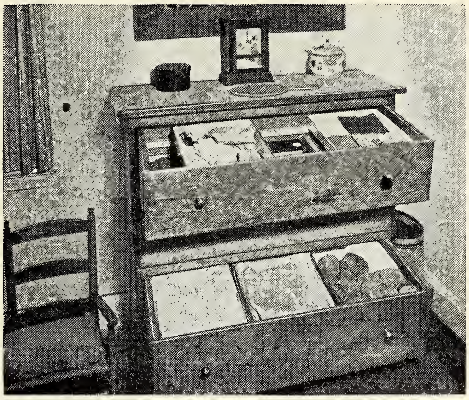


FIG. 75. In Miss Sayre's dresser, cleats are nailed on the sides of the drawers, and interchangeable cardboard boxes slide on the cleats.

There was a certain spirit in the Neilson home that was apparent to the students although it had not been voiced. Cooperation, mutual interests, and a respect for work had established a bond between the two parents and between parents and children that only years of mutual respect can bring. Patty had been looking forward to this visit from "the college girls" since she first heard of the tour. She was all dressed up and glowing with happiness and excitement, and did her share toward entertaining the visitors by turning a "sumsalt" or two. Barbara gravely exhibited her own room with her five dolls tucked snugly in their beds. Dick showed them his vegetable garden and announced that he was going to be a farmer. He is five, and mows "some" of the lawn.

Both the Neilsons take time to point out and explain to the children the interesting things of life: the wild geese flying south in formation at the end of summer, the gray woodchuck sitting on the bank gravely surveying his surroundings, the ravages of the muskrat who diabolically undermined the dam that Mr. Neilson had built across the creek to form a pond. Mr. Neilson aroused the children from their beds early one morning to show them a little doe standing watchful by the pool, and still another morning to see a wild mother duck and her eleven children swimming in the pool as though they owned it. It was Mr. Neilson who explained that you can't ever expect to get a hundred per cent value from your labors as a farmer, because the bugs and the insects must have their share; therefore it is best to be philosophical about it.

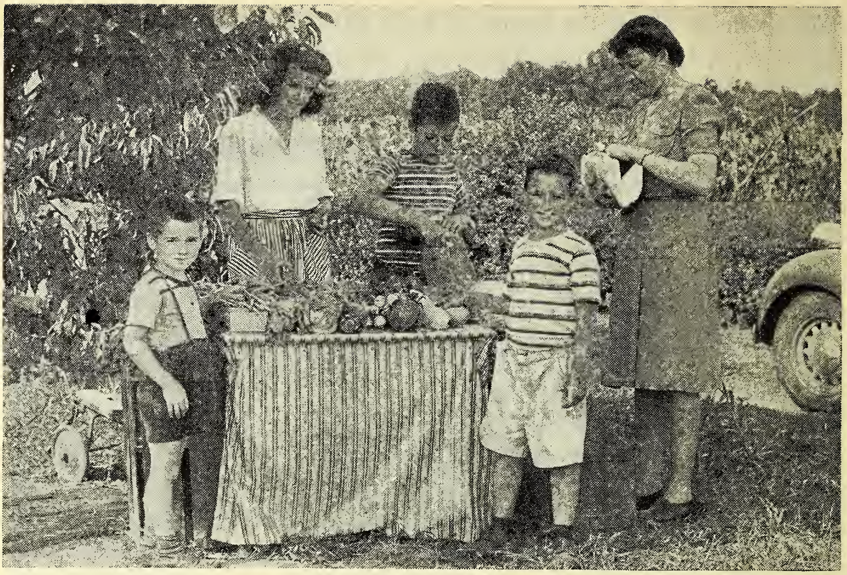


FIG. 76. Phil Overman has just made a sale. These children made this simple wayside stand themselves from crates. Each has his part in producing, harvesting, cleaning, pricing, and selling the vegetables. Each spends as he wishes his share of the net profits. The two younger children take orders and deliver to the neighbors.

As soon as Mr. Neilson wanted to sell some of his good land the Overmans knew that it was just what they wanted because they had a gardening project up their sleeves. They bought three acres up the hill beyond the Neilsons, and not liking to be in debt, they paid for their house from their savings. It was finished about the same time as the Neilson house.

Like Mr. Neilson, Mr. Overman teaches in the department of agriculture at the college. The Overmans have four children: Elizabeth, thirteen; Philip, eleven; Bob, seven; and Tommy, five. Mr. and Mrs. Overman believe that children should learn early both the effort and the rewards of work. They want them to understand the value of work in terms of money, and the value of money in terms of what it will buy; they want them to experience the satisfaction of achievement. For this purpose, they developed a cooperative gardening project. Each child has his plot of land, and each makes his contribution according to his age and ability. It is a common sight to see all six of the Overmans in the garden at one time, some weeding, others hoeing or cultivating, all calling back and forth to one another.

Even Tommy did his small bit almost as early as he could walk. And to help teach them the route of the vegetable from seed to consumer, they have a stand down by the road and the driveway (Fig. 76). It was a very simple stand at first, and Elizabeth and Philip were in charge. For their share of the marketing responsibility, Bob and Tommy sold vegetables to the neighbors. Each had his special customers, took orders, delivered, and collected. All the children learned when vegetables were ready for picking; they learned how to clean them and prepare them for sale, how much to charge, and what vegetables were in greatest demand. The older children who tended the stand learned to meet adults in a business way, and were often shrewd judges of their customers. At the end of the summer they pooled the proceeds as a family group, deducted the costs, and divided the remainder according to each one's contribution. Thus, arithmetic acquired meaning for these children when it became a tool for obtaining a fair price for their produce and for figuring their proper share of the income. It was different and more interesting than the arithmetic they learned at school. It was a means to an end.

Mrs. Overman, as the one at home all the time, supervises this project, and it takes time, insight, and patience. She is both the head of a business undertaking and a teacher. To her the project is not primarily a money-making affair, it is a school; and it is her responsibility to see that her children learn their lessons well and receive the satisfactions of work well done. She does not expect too much of them, and she teaches them that money is not the only end to be achieved. If some part of her job must be neglected, housekeeping is the first to go. She feels that she can always clean house, but her children will soon grow up. Meals, however, are always as delicious as they should be to satisfy hot and tired gardeners.

When war was declared, the Overmans realized at once that to feed the armies and the occupied countries every one who could must raise and save all the food possible. They determined to become, as far as possible, self-sufficient. In 1942 they bought seventy-five hens and a fresh Guernsey cow with a four-day-old heifer. Prices were high — $250 for the cow and $2 apiece for the hens — but this was balanced by the high price of milk and eggs. They finished the barn just before winter set in. Mrs. Overman would go down evenings and help Mr. Overman work, sometimes until ten or eleven o'clock, but they felt well repaid when they had their own milk all winter and were able to sell some to the neighbors. Mrs. Overman makes her own butter in the electric mixer. In the spring of 1943 they bought three hundred baby chicks and two baby pigs.

They sell thirty dozen eggs a week regularly to a cooperative store and also some to the neighbors. They eat $75 worth a year. They have been able to sell to their neighbors from four to eight quarts of milk a day — it dropped off during the summer — at 11 cents a quart. The milk is not pasteurized, but the cow was tested for tuberculosis and Bangs disease and although she has no contact with other cows they continue to have her tested periodically. She is not allowed to drink water from the brook back of the house, but drinks well water only. Although Elizabeth usually milks the cow, she is Philip's responsibility. He feeds and cares for her, and is learning to milk. They sold the calf for $75.

Bob and Tom are responsible for the hens, and they exhibited the young chickens and showed their homemade brooder house, which had been set up in the garage — while the car parked outside. Because of the threatened feed shortage, in the late summer they sold some of the hens for fowl, and since prices were good, they made a profit on the whole transaction. Later, however, the feed situation eased, and they were able to keep all their young pullets for layers, and to maintain the flock at the size they planned on, about two hundred hens. The children sell the eggs to a cafeteria popular with Army and Navy men and their wives, and it gives the children a particular satisfaction and pleasure to be directly contributing to the comfort of the military personnel.

During the war years, they have processed each year nearly a thousand cans of fruits and

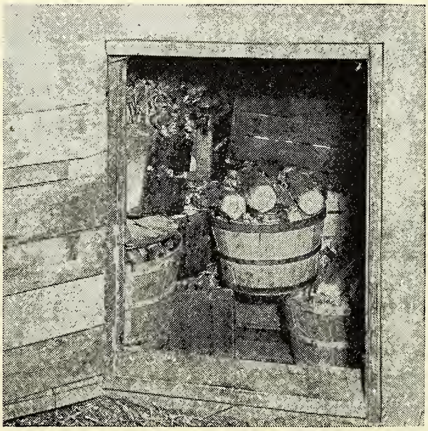


FIG. 77. The Overmans dug this storage pit for vegetables into a bank. It is 7 feet long, 4 feet wide, and 5 feet high, with cement walls and ceiling. It opens into the barn, and the temperature does not go below 34 degrees in winter. Here are stored the vegetables that need cold and dampness.

vegetables. A pit that has a door opening into the barn (Fig. 77) was dug into a bank for the storage of raw vegetables. This pit is approximately 7 feet long, 4 feet wide, and 5 feet high, with concrete top and walls. The dirt floor is on ground level and is covered by wooden slats. Above the pit the earth is 3 feet deep. The pit keeps an average temperature of approximately 34 degrees during the cold winter months. Here are stored crates of Chinese cabbage, carrots, beets, celery — all vegetables that need cold and damp. Parsnips are also stored here as they are easier to get at than when left in the ground. Under the front porch is another storage room that opens off from the basement (Fig. 78). It is insulated from the basement, and has outside ventilation. In the hottest part of the summer and in the coldest winter weather the windows are closed, and the temperature is right for cabbage, potatoes, and apples, and for the vegetables that are brought in from the underground pit a bushel at a time for current consumption. Eggs are kept here also. Squash, onions, and sweet potatoes, which need a dry place, are stored on the basement floor. Like the pit in the barn, the floor of this storage cellar is dirt. The walls are cement, and the top is of glass wool.

It was Mrs. Overman who organized the neighborhood children into a 4–H club. Philip, Bob, Tommy, Richard Neilson, and other boys from the neighborhood belong, with the younger generation coming in as they grow old enough to be eligible for membership.

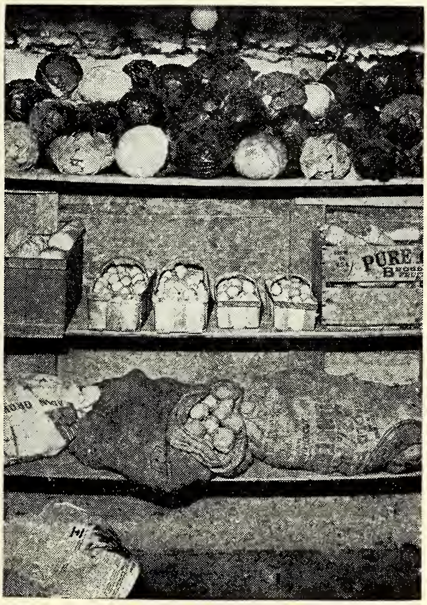


FIG. 78. Using the front porch for a ceiling, the Overmans built another vegetable storage room opening from the basement and level with its floor. This room is approximately 8 feet long, 6 feet wide, and 8 feet high. It has a dirt floor and cement walls, has outside ventilation, and is insulated from the basement. Here are stored vegetables that need a relatively drier atmosphere than those kept in the pit.

Farther up the road past the Overmans are the Pattersons. They bought and built on the last lot in the row, the largest Mr. Neilson sold, fifteen and a half acres. Mr. Patterson is connected with a business firm in X and, before her marriage, Mrs. Patterson was an extension teacher in foods and nutrition. Paul is fourteen and Margaret is ten. Their invalid grandmother makes her home with them. Since the war, Mrs. Patterson has had to do her own work, with substantial aid from Margaret.

Raising and preserving their own food has always been a big enterprise with the Pattersons, and with the war its importance and scope have increased. They rent a freezer locker at a cooperative store. They freeze, can, and store in bins enough for their needs. With the first berries in spring, canning becomes an important project for the entire family, and they have set up a canning center in one end of the basement laundry room (Fig. 79). Vegetables and fruit are cleaned in the yard, and fruit jars are washed in the laundry

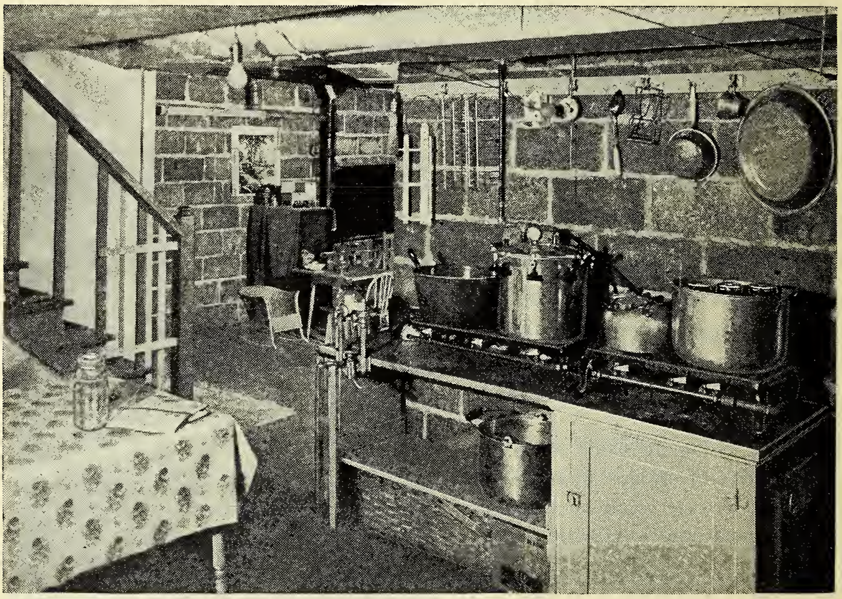


FIG. 79. Mrs. Patterson's canning center is opposite the tubs in a basement laundry room. It is cool here, there is room for the permanent installation of special equipment for canning, and the tubs (opposite the canning center) are available for washing jars. The kitchen is thus left undisturbed. On the left end of the counter is the tin canner. The opening leads to Margaret's play center in the room shown in Fig. 80.

tubs. Along one side of the room is a long counter with two gas hot-plates, one with two burners and another with three. Over the burners hang small utensils, and the larger pieces of equipment are on near-by shelves or hooks. Just outside this room are cupboards for storing the canned goods. When a big canning job is under way, the whole family pitches in. Mr. Patterson brings in the produce, Paul and Margaret clean and pick it over, and Mrs. Patterson does the canning. To make food preservation pay from all angles it needs to be done quickly, easily, without confusion, and in comfortable surroundings. It is also important to be able to get away from all sight of the job afterwards. The Pattersons have solved these problems. The entire job is done on one level in a cool room, and when mealtime comes, Mrs. Patterson goes upstairs into an orderly, restful kitchen.

Just off the canning room and laundry is the recreation room (Fig. 80). In the center of the room is a ping-pong table, sometimes used as a picnic table, and here family members and guests spend many

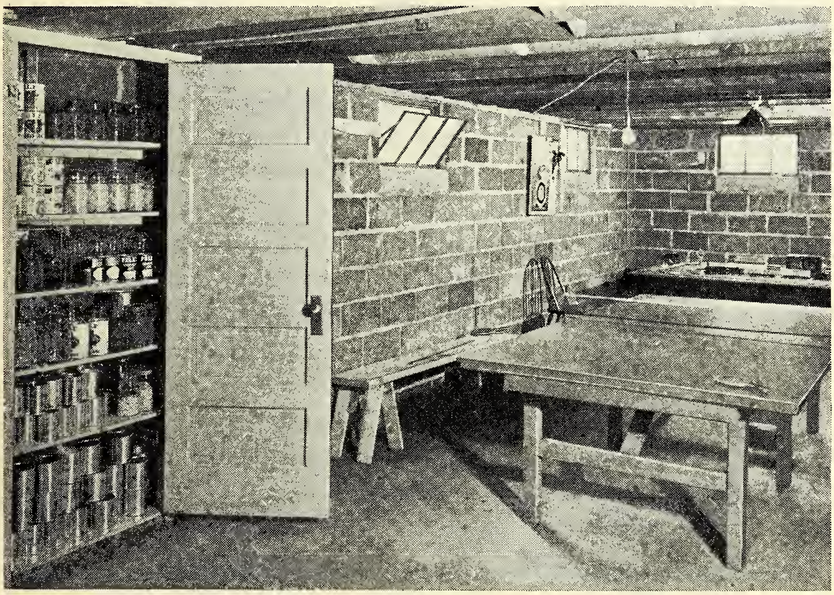


FIG. 80. This canned-goods cupboard, only a portion of which is visible, faces the opening to Mrs. Patterson's canning room, with Margaret's play center on this side of it, as shown in Fig. 79. Empty jars have their own shelf space. The ping-pong table is also used as a picnic table for both children and adults. Paul has his electric train on the big table beyond. The stairs leading to this basement are wide and easy.

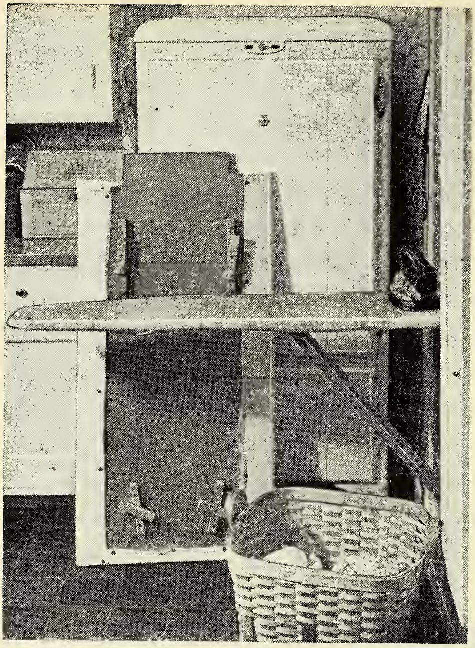


FIG. 81. Leaning against the refrigerator is the plywood ironing board top that Mr. Patterson made to his wife's specifications. It is 44 by 22 inches, a width Mrs. Patterson can reach across easily. The end is notched to fit tightly inside of the ironing board cupboard, and the board is held firm on the ironing board by the cleats and buttons visible in the picture.

happy hours. At the near end of this room are Margaret's dolls and other playthings, and at the far end is Paul's electric train, set up on a large table.

After the students left, the women whose homes had been visited assembled at Mrs. Patterson's while the college instructor in Household Processes, who had joined the tour, showed moving pictures of a girl ironing a shirt on a specially designed ironing board. A student had designed this board in her attempt to discover the quickest method of ironing a shirt. Her final achievement showed an over-all time of five minutes for a shirt and only three turnings in the process.* She had brought the board with her and stayed with the group of homemakers to demonstrate it. After the movie she ironed a shirt on this board and explained the method. The women were interested and asked questions and discussed their own methods. The ironing board was an ordinary standard type ironing board, adjustable in height, with a 20-inch-wide, plywood removable top that could be clamped on or taken off at will. This ironing board was left with Mrs. Patterson when the group left, and she experimented with it. She found that five-ply wood makes a sturdy board that is not uncomfortably heavy and yet is sufficiently substantial. A few weeks later she showed an adaptation of it made by her husband (Figs. 81,

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* Elaine Knowles, "A Simple Way to Iron a Shirt," *Cornell Bulletin for Homemakers 629* 1944.

82). It is of plywood, 44 inches long and 22 inches wide, and clamps to the ordinary ironing board which folds into the wall. Thus it is rigid, and is wide enough to take a dinner napkin or man's handkerchief with a margin left over. At a cost of 89 cents, she padded it with a flannel sheet folded in fourths. To iron an 81-inch sheet she folds it into fourths, irons one side, moving it twice, turns it and irons the other side, again moving it only twice. Since she irons four or five sheets a week, this saving means something. She estimates that she saves approximately 15 per cent of her previous time in ironing a shirt. Mrs. Patterson is delighted with it. She says her husband's labor in making it has been more than repaid in the satisfaction she has in using it. She uses the supplementary top for everything but dresses.

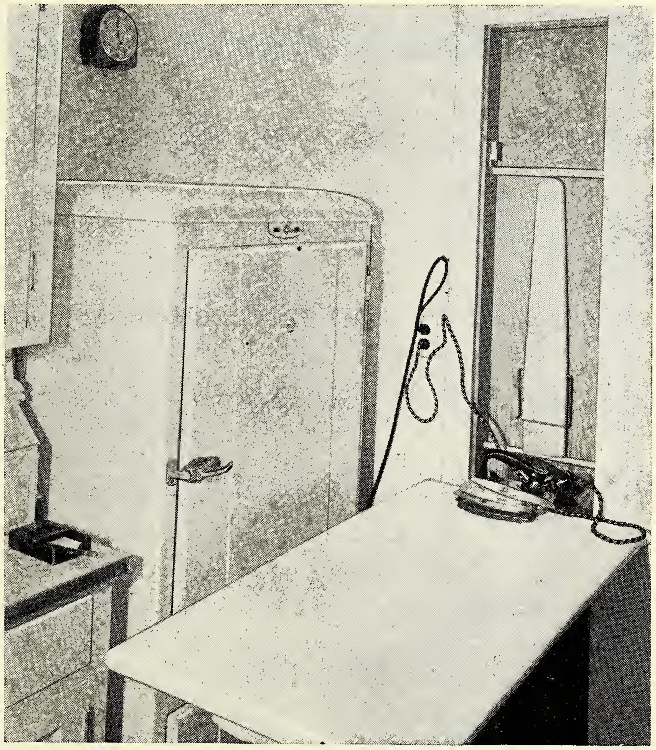


FIG. 82. The top is in place on the ironing board shown in Fig. 81. When not in use, it is stored between the refrigerator and the wall. Any one could easily make a similar board from five-ply wood, the width to be adjusted to the comfort of the user.

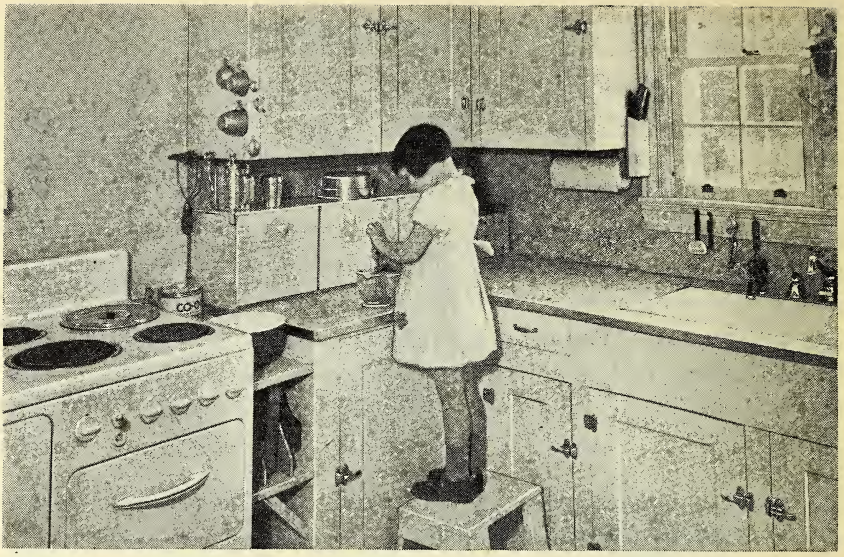


FIG. 83. Part of the cheerfulness of this kitchen is due to the light gray linoleum which is used on both floor and counters; it reflects light into the corners, yet its mottled pattern camouflages spots and stains. Mrs. Redding had the narrow shelf put in between the stove and mixing center to give a convenient height for beating. Mr. Redding made bins for sugar and flour from Mrs. Redding's designs.

Across from the Pattersons and at the east limit of this little neighborhood is the Redding home. Mr. Redding teaches at the university, where both he and Mrs. Redding had done graduate work. There are also Nancy, who is nearly four, and Jim, who is two.

The Reddings planned their house with the idea of adjusting it to the children's changing needs and of making the work in it as simple and easy as possible. To have the pleasure of their own home now, they elected to postpone good furniture in their long-time plan for the development of their home in favor of immediate household conveniences. They started in their new home with an army cot for a davenport and small rag rugs on the floor. Furniture is bought piece by piece as they need and can afford it, and Mr. Redding builds bookcases, tables, and other simple pieces.

Formal entertaining, also, is left for the future, since the dining room is now being used as playroom and nursery, and as a place in which to lie down and take a nap. Nancy and Jim dress in this room, and each has one drawer in a dresser to keep clothes in and low hooks on which to hang them. There are shelves for toys, and a small table and chair that Nancy's father made for her. And here in this pleasant room Mrs. Redding irons. Until a playroom for the children can be finished off in the basement, dinner guests are served buffet style on trays around the fireplace or at a table in one end of the living room. The family meals are usually in the kitchen. They enjoy eating there, as it is a most attractive and convenient room, and it simplifies Mrs. Redding's work appreciably. An important part of the kitchen equipment is a stool on which Nancy stands to help her mother (Fig. 83).

Mrs. Redding put up almost 500 quarts of fruit, vegetables, and chicken. By checking at the grocery, she found that the retail price, had she purchased them, would have been $181.69. She spent for fruit, sugar, lids, rubbers, etc., just $39.48. With the exception of the fruit purchased they raised all the rest of the produce she canned. If bought, these canned fruits and vegetables would have required 8,426 blue ration points — enough points for four years for a family of four. In addition to the new canning, Mrs. Redding had on hand as much frozen chicken, vegetables, and fruit as their rented freezer locker would hold. She said that the family would eat all of the food in the next year. Of course the value of her time spent in canning should be considered, but she says she enjoys canning and that it is not an added burden because she makes up for it by cutting down on some of her routine household tasks.

But probably the biggest labor saver is the combination laundry and lavatory on the first floor (Fig. 84). When Nancy and Jim come in from play, covered with dirt, they go straight to the laundry, shed their clothes, and are popped into the tubs. They enjoy this type of bath more than the bathtub variety, and it saves their mother going up and down stairs. In this room the children hang their outdoor wraps on low hooks. Mr. Redding fixed up a pulley clothesline outside the window so that her clothes can be hung from indoors.

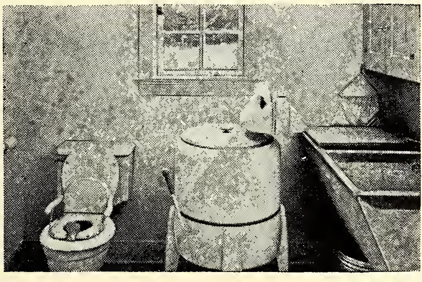


FIG. 84. A toilet on the ground floor is especially useful in a household where there are children. This one in Mrs. Redding's laundry has a detachable seat for Jim, so that he can learn early to care for himself. A coat-hanger spreads the clothespin bag conveniently open.

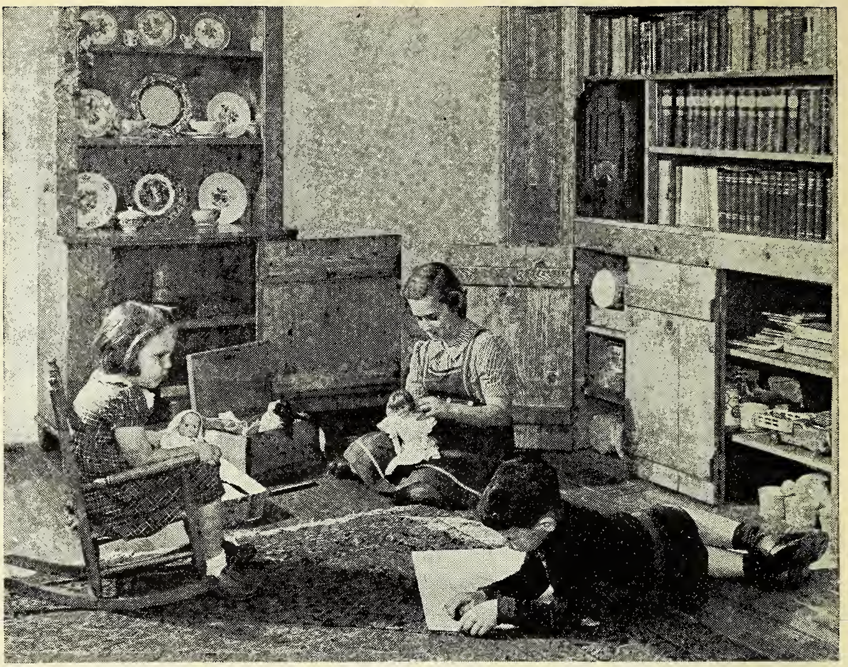


FIG. 85. In Miss Sayre's living room are three cupboards, one for Barbara, one for Dick, and one for Patty Neilson, with playthings especially selected or salvaged for them. Such an arrangement makes it possible for children to entertain themselves.

By the time the Neilsons needed Miss Sayre's rooms and bath, Miss Sayre had become too attached to the community to leave it. She had had her own flower garden and had grown her own vegetables; she had set up a special play corner in her rooms for Barbara; for four years she had watched the willows turn green in spring and traced the tracks of rabbits and birds in the winter snow. So she built a white, green-shuttered cottage on Mr. Neilson's last lot, two and a half acres of meadow land that sloped from the house to the meandering creek and the pine woods. In her last year at the Neilsons' she sat in her window and saw her house take shape, first in her mind and then from basement and scaffolding to roof. Now, after years of living in rooms in other people's homes, she has a home of her own, she "belongs somewhere." She, too, has furnace and water and garbage-disposal problems, the worries of a snow-clogged drive in winter and flies in summer, the nuisance of getting storm windows on and off. But she can entertain by her own fireplace, and wash dishes in a sink; she has back-door neighbors and children who run in and out; she can discuss plant sprays and tell "what the children said" with the best. And she has found out that the rabbits that make such pretty tracks in the snow are on their way to eat the young shrubs. Her furniture is early American, pine and maple, of simple design. These pieces are not merely a pleasure to her eye; they look "lived with" and can receive new scratches and dents from the visiting children without breaking her heart. Barbara, Dick, and Patty have individual cupboards where Miss Sayre keeps a few inexpensive toys, empty boxes of odd shapes, gay pieces of colored paper, scraps of ribbon, "party favors," and the like (Fig. 85). Barbara inherited three of Miss Sayre's dolls.

She had to make a small amount of money do. To build the house she invested her savings and gave up her pre-war plan for a trip to Europe. Her savings made a down payment, and a bank loan financed the rest. She early abandoned the idea of engaging an architect, first because it would add 6 per cent to the cost and second because she found a plan she liked in a homemaking magazine. The blueprints cost $1.50; she made a few changes for personal convenience, and turned over the building to a reliable local contractor. Because city water would need to be piped some distance at her expense, she decided on her own well. She chose a gas rather than an oil furnace because the initial cost was lower and she felt that its operation and upkeep would be less trouble to her; it was a fortunate choice, in view of war-time fuel rationing. She postponed cupboard doors in the kitchen, but provided adequate closet space with more than the usual number of shelves, all adjustable (Fig. 86). Her house

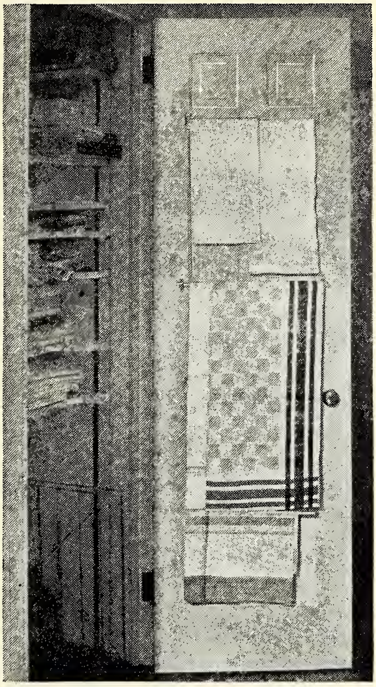


FIG. 86. Tablecloths hung on a door, as in Miss Sayre's linen closet, keep smooth and even without cross folds.

was within five hundred feet of a fire hydrant, but as she was four miles from the firehouse, she put pails of sand and water in the attic, and bought a 24-foot ladder and a 100-foot garden hose that would attach in the basement and could be drawn up the basement stairway and the pulldown stairway (Figs. 87, 88) to the attic. With fire extinguishers in strategic places she felt reasonably safe from fire. To prevent accidents, switches were placed so that the lights on the basement stairs could be turned on from the hall and from the basement garage, and handrails were set on both sides of the basement stairs.

FIGS. 87, 88. Miss Sayre's attic is used only for storage, and Barbara is easing from the ceiling the pulldown stairs that saved the space of a stairway and cost only $36. It manipulates easily, and has a handrail at the right. The chain is all that shows.

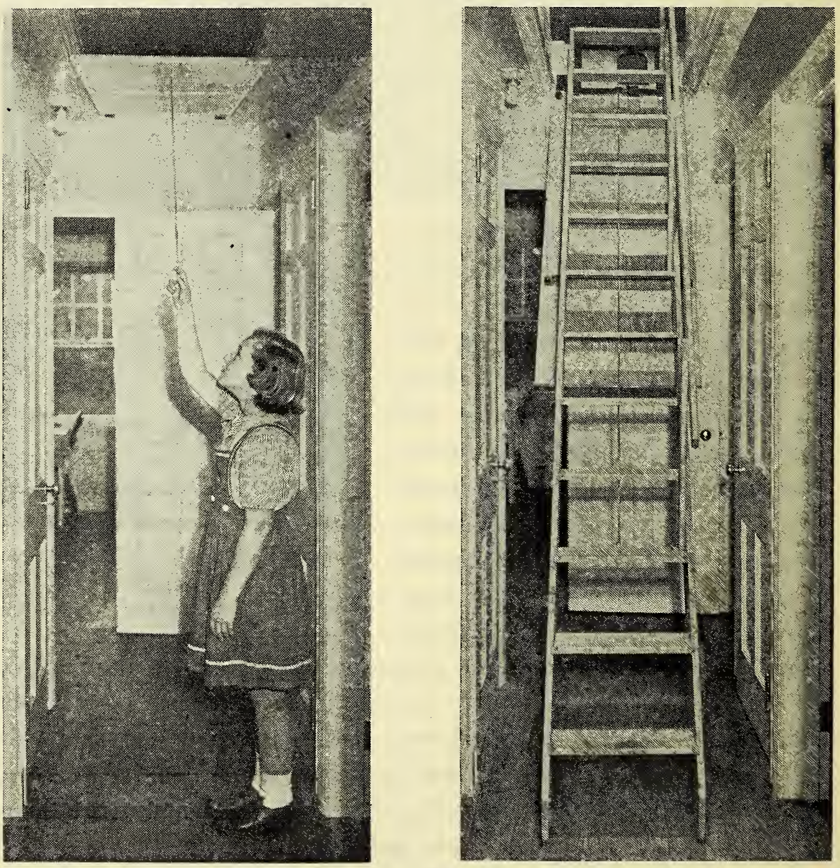


FIG. 87.

FIG. 88.

She made two misjudgments, fortunately not too costly. She failed to install lightning rods and within a year the house was struck by lightning, though not seriously. She then installed lightning rods at a cost of $75. Fearing to strike sulphur, she stopped drilling operations on the well too soon and it went dry; but again fortune was with her, for the drills struck a new vein in a few hours (and no sulphur).

At first a woman who worked for Mrs. Neilson came in once a week to clean. When the woman took a defense job, eleven-year-old Henry Stone, who lives about a mile up the road, took over. Henry is a husky lad who likes to work and likes to earn money, but he had to be taught. It was not long before he vacuumed rugs and upholstery, dusted venetian blinds, washed windows, cleaned the bathtub, scrubbed and waxed the kitchen and bathroom floors, and performed other tasks about the house with the degree of success his astounding ardor deserved. He mows the lawn and digs weeds. But when Henry cannot come, Miss Sayre has found — as others have — that streaks on the windows and dust on the furniture are relatively unimportant to either enjoyment or health. With the money he earns Henry buys defense stamps, and his father matches each stamp with another.

In the summer of 1943, part of the lot set aside for flowering shrubs was plowed for a vegetable garden, and through a cooperative project with friends enough vegetables were raised to carry them all through the summer and provide substantial quantities for canning.

Last of all, the little one-room schoolhouse across the road from Miss Sayre got a new lease of life. The Thurmans, both office workers at the university, had learned that this ninety-year-old one-room schoolhouse and its three quarters of an acre of land were up for sealed bid. It was charmingly located; great willows spread their arms overhead and a broad view of fields and hills was all about them. Though young and inexperienced in such things and somewhat fearful of the undertaking, the Thurmans made a bid. When it was accepted, they were, as people are apt to be, thrilled and delighted. With the remodeling the house cost as much as would a similar one new, but it is of much sounder construction than a house built today. Oak beams and thick wide-board floors make so solid a foundation that there is no vibration or squeak anywhere in its sturdy little frame. They hired their own carpenter and workmen, and did a great deal of the work themselves "after hours." Their lease on the rented house expired before the little house was finished, but they moved in anyway and picnicked cheerfully with flies (undesirable) and friends (desirable) as their guests by the open fire in the yard. When Claire was born, Mrs. Thurman gave up her job.

The Thurmans wanted a family, and also wanted to entertain their friends easily and often. They considered these two needs in planning the rooms, and Mrs. Thurman considered them in planning for her housework. The construction of the house, however, restricted what they could do. The living room almost planned itself. It extends across the entire front, with a fireplace on one outside wall and large picture windows for light, sun, and view. Behind the living room are the other rooms. On the south, and opening from it with double doors, is the dining room, with a large picture window. On the north is the stairway leading to the bedrooms. Behind the stairway is a general utility room and the garage. In the corner off the dining room is a tiny kitchen built in what had been the school entryway. The utility room is a great labor saver. It houses the gas furnace, the water heater and electric pump, the laundry tubs and equipment, and a toilet and lavatory. A chute lets the clothes down from the upstairs rooms into a basket beside the tubs. The garage opens into this room and also into the kitchen.

Mrs. Thurman had always wanted a large kitchen with a dinette, and particularly wanted a southeast exposure; but the location of certain important beams made this unfeasible, so she compromised. The kitchen is in the southeast corner, but is a tiny "pullman" kitchen with a breakfast bar that frames off a passageway opening into the dining room and the garage (Fig. 89). Mrs. Thurman demonstrated how she can sit on the stool by the breakfast bar and reach practically everything she needs for breakfast. The kitchen is lined so completely with cupboards that only one wall is bare, and that she papered herself at a cost of 50 cents. She says that while it is impossible to get a crowd in the kitchen to help when she has picnics, it is perfect for two.

Since the Thurmans like to have guests for the week-end and longer, they made three small bedrooms in the school attic instead of two large ones, and eventually they plan to raise the kitchen roof and make another bedroom. The bathroom, on the other hand, is large and contains a make-up center. In addition, there is a table on which

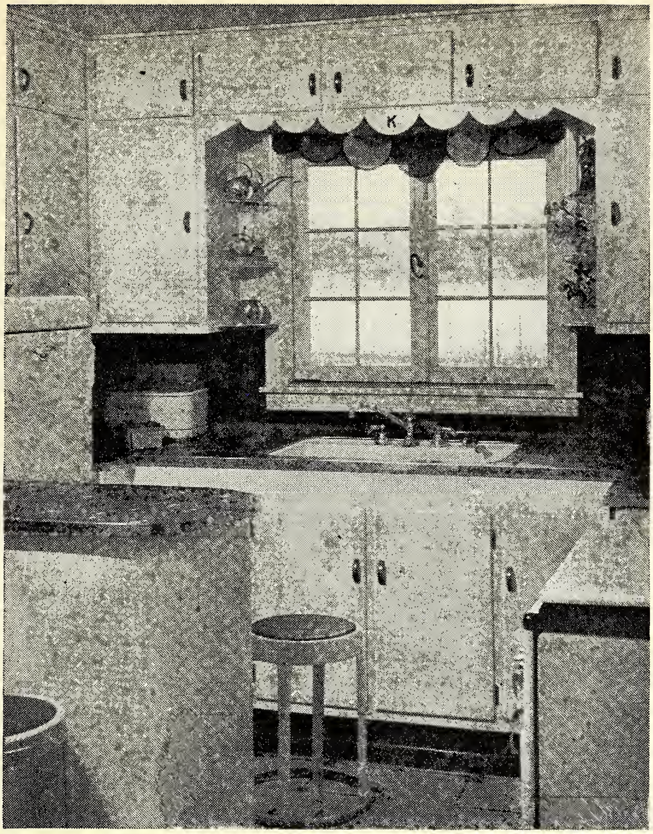


FIG. 89. This small pullman-type kitchen is so compactly arranged that Mrs. Thurman need hardly take a step to prepare a meal, and still it is large enough so that her husband can dry the dishes for her without getting in her way. They eat breakfast at the counter, which has open shelves facing the sink. The south windows overlook their Victory garden and provide a view of the meadow and the woods beyond.

she bathes Claire. It is at a comfortable sitting height for Mrs. Thurman and is within easy reach of the wall cupboard where Claire's bath supplies and clothes are kept. As to her housework, if the house is orderly and pleasant to live in, Mrs. Thurman thinks it less important to dust every table leg than to miss her daily rest.

The Thurmans have a Victory garden on a neighboring lot which they hope some day to buy. A sunken garden, too, is planned for the future in a low spot where now they fight pestiferous poison ivy. But these things must wait, since Mr. Thurman may be called into the Army, and she herself may have to go back to a job.

COMMENTS OF STUDENTS AFTER THE TOUR OF MERRIVALE ROAD

"Which is more important, my house or my home?" This is the first and greatest question that a homemaker or housewife must answer. A house is the shell about the home. The places I have loved the most have been those where the people were more important than the house they lived in. These homes had a lived-in look.

Those people were interested in making work in the home easier to give them time to work outdoors and in activities outside the home.

I was interested in seeing the time it took to plan for a home and family. These people didn't decide suddenly that they wanted a home, buy it the next day, and go on from there. Instead, they planned for years ahead, saving money and ideas until they were sure what they wanted.

I like the attitude of letting some things go, cutting down on housework to have time free for family living. These families wanted cleanliness and order, but not to the point where it became a drudgery and a sore point to the family.

That tour was a grand experience, and I came away with a new conception of management. Management is not only having suitable working centers and heights, having things in proper places. It is a way of living that includes every effort to minimize housework in labor and expense for the best reason in the world, that of really living. This managing is a constant thing, every day bringing new adjustments to changing conditions.

Management in the home is not efficiency, or at least it doesn't have to be. Management in the home is not living on a minute by minute schedule so the work is always done regardless, not unless that is the most important goal in your life. Management is having fun with your children . . . it is first things first.

It had been difficult at first for me to see beyond sinks, working surfaces, and more convenient arrangements as typifying good management in the home. In visiting the various homes I saw that good management is not one or another convenient center alone. It includes a home and the people who make up that home.

In my mind that is what good management should be — a natural, easy procedure with some logical basis. It is at the same time logical, in that the procedure is not a helter skelter affair. I could see in all of the homes that this thread of good management carried through all that the families did.

No one can lead us to a museum case labeled "management" and say, "There it is. Look at it and remember it." No one can say, "If you do as I direct, you will be managing well," because management is an individual matter.

SUGGESTIONS FOR DISCUSSION AND INVESTIGATION

1. Considering families you know or the families in this book, discuss the relative values of renting, buying, and building a home. What factors need to be considered in making a choice?
2. What is meant by: an abstract, a deed, putting a contract out for bid, a sealed bid? Where can you secure this information?
3. In building a house, what are the functions of: architect, contractor, plumber, heating contractor, electrician, carpenter? Explain the importance of the owner discussing with the contractor in advance labor problems that may arise. Why is it important to have the services of an architect? What services are available if a family cannot afford one?
4. If an owner employs a workman to mend his roof, what risks does the owner run? If a passerby is injured by a break in the pavement of the street-walk in front of his house, what liability has the owner? If a guest is injured by a broken porch step, a skidding rug, or other "guest trap," what liability has the owner? Find reliable information on these questions.
5. In what ways does the house you live in restrict you? Where does it give you freedom of action?
6. Discuss the Overman's garden project. Discuss the problem of children working for and being paid by their parents. How did the Overman project avoid some of the difficulties of this problem? Without skillful supervision and an understanding of children, could such a project do harm instead of good? How?
7. Look up recent extension or experiment station bulletins on the subjects of storage, dehydration, canning, and freezing of vegetables.
8. Compare vegetables fresh from the garden with those bought at a grocery in flavor, appearance, and vitamin and mineral content. Look up references on this.
9. When do you think it pays to do your own canning and freezing? Does it pay you in normal times? Give figures in evidence. Investigate freezer lockers in your community. Would you rather rent a community locker or own a home unit? Give the advantages and disadvantages of both procedures.
10. Why should a cow be tested for tuberculosis and Bang's disease? What is Bang's disease? What illness does it cause in humans? How can it be prevented? Find information on these subjects.
11. Check the height of your ironing board at home. Is it the best height for those using it? Is it adjustable? Experiment with ironing a shirt with the minimum of motions and turnings.
12. Consider all the possible functions of a combination laundry and bathroom. What are the advantages of such a room? the disadvantages?
13. How can you tell when it is wise to equip a house with lightning rods? Who pays the damages if your house is struck? Verify your answer.

CHAPTER 13

HOME MANAGEMENT AND THE COMMUNITY

The home is not an isolated unit. It is part of the community, and the community in turn enters into every part of the home. Family members from different homes come together at the church, the school, the grange, the farm bureau, the home bureau, the 4-H club, and other community centers, and the ideas shared there become part of the home life. Such community gatherings are important to families who are often isolated, and too often tired, overworked, worried, and discouraged. "I don't know what we would do without our church dinners," a woman said to the home management specialist during one of the depression years. "We get together and have fun. It keeps us from getting too discouraged." The women in these communities have reasoned: "If the kitchen management conference helps us so much in our homes, why would it not be helpful in our community home?" Management conferences in community centers have been frequent throughout the state.

THE CHURCH AT KENT

A most interesting and successful community kitchen project took place in the Kent Presbyterian Church. Kent was a small village, and their plan was an ambitious one. It was nothing less than to build on to their church a wing that should house a kitchen, a dining room that would serve also as a general meeting place, a coat room, and toilets. They had a "kitchen committee," and a "building committee" of which a Dr. Beech was chairman. They had about $600 to spend. A church architect in New York had given them an estimate on the job of from $5000 to $6000, but this astronomical figure had not discouraged them. They had bought an old church for $200 which they thought would provide enough lumber to do the building, and members of the community would do the work. The $600 would see them through — or almost.

How large should the kitchen be? To answer this question the group invited in a specialist from the college to give them advice. They discussed the various types of meals they would serve, how and where the food was to be prepared, the number of persons to be served at one time, and the number of persons who would "do the work." Space could be saved and traffic jams avoided if a serving counter were built between kitchen and dining room and the stove and sink were so placed that hot food could be passed from stove to dining table over the counter at one end while soiled dishes returned to the sink over the other. They decided that the simplest plan would be to lay out, on that part of the church lawn where the kitchen was to be, a test arrangement for cooking and serving, allowing enough room between parallel working units for two stout women to work back to back. When the best arrangement had been decided upon, they would just build the kitchen walls around these working centers.

Equipment was the next question discussed. They wanted to use oil stoves. It was suggested that they could cut down the sides of a wash boiler, fill it with hot water, and use this on the oil stove as a "bain marie," or hot bath, to keep dishes of food hot without burning. Pictures of an institutional "bain marie" and of a steam table were shown them. Some one suggested that a large shallow galvanized tank might be mounted on wheels and thus rolled like a cart over the oil stove. This tank could accommodate two rows of containers so that food could be served from each side, thereby doubling speed. Dr. Beech immediately said that he saw possibilities in the idea and asked to keep the pictures, because he knew a metal worker who was out of work and could make such a table from scrap metal.

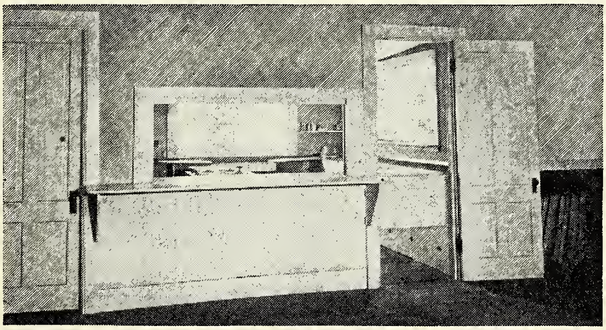


FIG. 90. Looking into the church kitchen from the dining room. The counter in front of the long opening can be dropped, the sliding door above pulled down, the door to the kitchen closed, and the kitchen is "gone." At the right of the open door is the lean-to where the collapsible dining tables share storage space with the kitchen steam table (see Fig. 94). A door conceals the opening. The drop-leaf serving counter extends across the right doorway. The door at the left opens into the hallway.

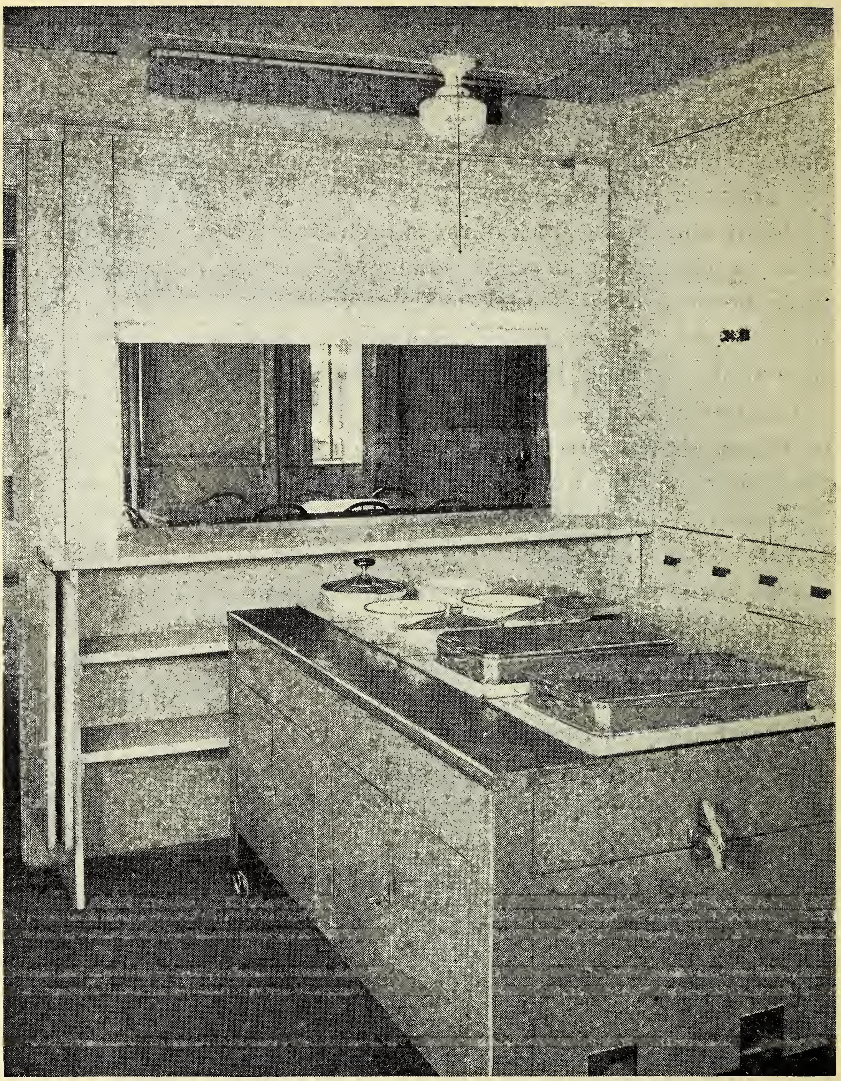


FIG. 91. Looking into the dining room from the kitchen. Note the excellent lighting over the counter, and the ventilator through which the hot air from the steam table escapes to the attic; when not in use the ventilator can be closed. Desserts or salads can be placed on the shelves under the counter before the meal. The dish cupboards at the right were once in a doctor's office. The steam table was made from scrap metal by a metal worker, and the food containers in it were salvaged from a discarded steam table. The gasoline stove installed in the table (Fig. 92) heats the water around the food containers, and the holes at the ends furnish ventilation for it. For dishwashing, hot water can be drawn from the tank through the faucet visible at the end. Photograph from *Capper's Farmer*.

The next year the specialist returned to the county and was invited to come and meet Dr. Beech and the committee again in order to see the progress made and offer further suggestions. She was dumbfounded. The kitchen and the dining room were built mostly by Dr. Beech who often came over to work as early as four o'clock in the morning. He admitted that carpentry was his hobby. "In fact, I've often said my father spoiled a good carpenter to make a poor doctor."

The dining room was large, light, and airy. It was an all-purpose assembly room, with a platform at one end for plays and speakers. The opening between the dining room and kitchen could be closed when meetings were being held in the dining room (Fig. 90). This opening was equipped with a counter, and a drop-leaf across the door to the kitchen provided additional serving space and also acted as a bar to keep waitresses out of the kitchen; in fact, it was later found necessary to block up the space below the drop-leaf to keep out dogs and children. Dr. Beech had made the dining tables 30 inches wide and long enough to seat ten persons. They were finished with a waterproof varnish and were set with table mats in place of tablecloths. Each could be set up separately for a family type dinner,

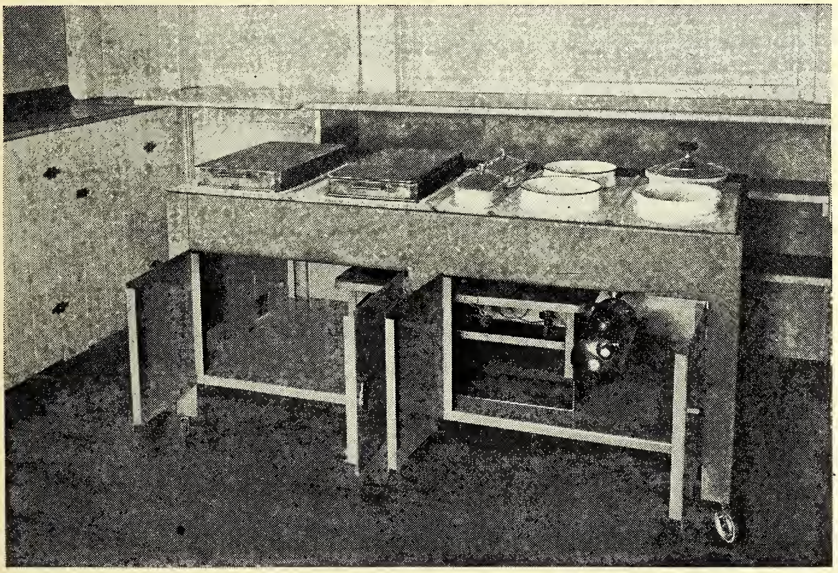


FIG. 92. Rubber-tired casters make the steam table easy to move. Ordinarily, it was used as shown in Fig. 91; but for cafeteria service, it was moved to the dining room.

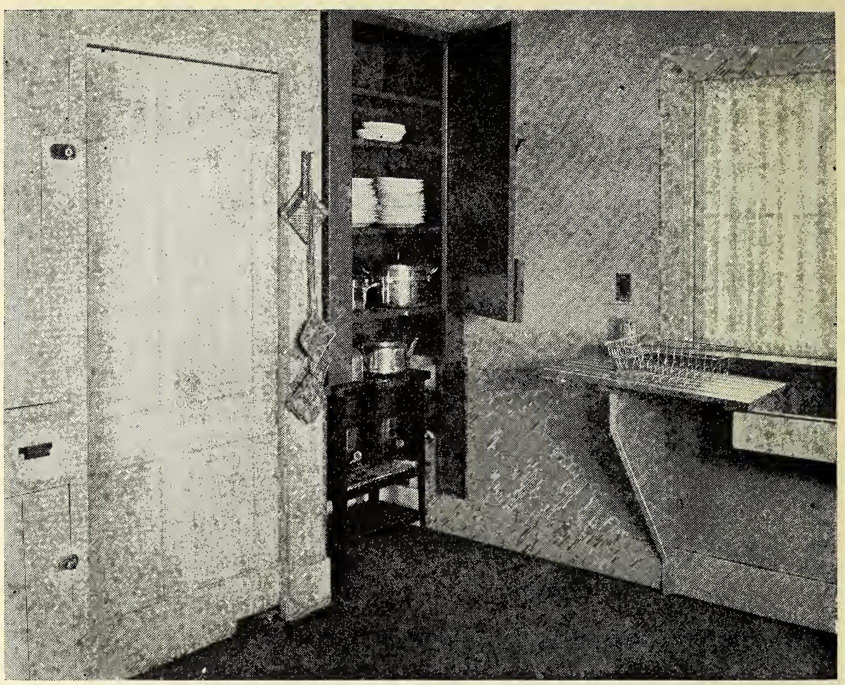


FIG. 93. The closet is lined with metal and serves as a warming oven for the dinner plates while the water heats for coffee. The door at the left opens into the hall. At the left of this door are the dish cupboards shown more fully in Fig. 91. Dishes are carried on a metal service wagon to the steam table, counter, and dish cupboard.

or put end to end or in a hollow square for club dinners. After the dinner, they could be folded up and pushed into a low lean-to (Fig. 90) along with the steam table from the kitchen (Fig. 94). Once the counter shelf was folded down, the counter opening closed, and the kitchen door shut upon the dishwashers, the sole evidence of dinner was the inner satisfaction.

The kitchen was a notable achievement of compact and efficient planning. It was cool and bright, with two large windows and ample artificial light. An electric fan at one end and an opening into the attic at the other made for excellent ventilation (Figs. 91, 94). Under the serving counter were shelves on which desserts could be placed. A shelf counter ran along the left wall from the dining room door to the sink across the room (Figs. 92, 94). This shelf was covered with a brown felt-base floor covering which curved up to the wall. Soiled dishes, received across the drop-leaf at the door, were pushed along

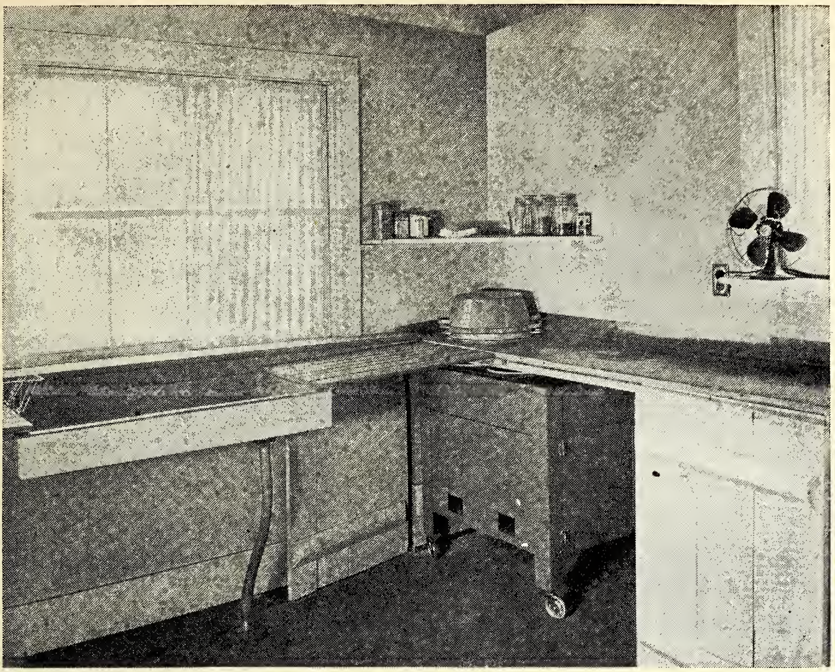


FIG. 94. The shelf is continuous to the drop-leaf in the dining room door. The steam table is shown pushed out of sight into its half of the lean-to. A hole was later cut in the shelf, and a garbage pail set beneath it at the right of the steam table. Double doors shut everything out of sight. Both the natural and artificial lighting are good.

this counter directly to the sink. A hole was later made in the shelf near the sink and a large garbage pail put beneath it. As Dr. Beech said, "Now, a lady can sit there on a pedestal and scrape garbage." When not in use, the hole was covered and inconspicuous.

Around the corner in front of a long window was the sink; running water, however, was still a thing of the future. In the corner to the left of the sink was a warming closet made from scrap metal by a local metal worker (Fig. 93). Under the shelves of this closet stood an oil stove for heating water and for warming the plates on the shelves above. A metal service wagon was used to carry these warmed plates to the steam table for filling, or to carry clean dishes from the sink to the dish cupboard, seen closed in Figs. 91 and 93. At the left of the warming closet was the door to the hall, and the dining room also opened into the hall. Opening into the hall were coat closets, a closet for brooms and for other cleaning equipment, and two toilets.

To the query, "Are they chemical toilets?" Dr. Beech replied, "That depends. We just put pails in. I tell people they are chemical toilets to prevent an argument. You can put chemicals in if you want to."

The really great achievement was the steam table. Freshly sprayed with gray paint, it was very professional in appearance (Figs. 91, 92). The food containers set into a tank in the top of the table were salvaged from a discarded steam table that had once been used at a state fair. Underneath the tank was a three-burner oil stove, later exchanged for a gasoline stove. When its safety was questioned, Dr. Beech said they hoped eventually to install bottled gas. When in use, the steam table could stand at right angles to the serving counter, and there was ample room, indeed, for two stout ladies to work comfortably on both sides. It was equipped with rubber-tired wheels and rolled easily into the lean-to at the end of the dining tables (Fig. 94), where doors shut it out of sight leaving the kitchen free to be used for a Sunday school room. Dr. Beech told how the men had served a dinner a few nights before. With men working on both sides of the steam table, food for fifty persons was served quickly and was "good and hot." But he admitted that the guests began to arrive before they were ready, so they had to call upon the women for help.

The pride taken by the creators of this kitchen and dining room was not merely pardonable, it was commendable. When the request was made to take photographs of it, one of them said, "We'll be famous," and a church trustee added gleefully, "It's 'some punkins.'"

It is obvious that the success of this venture on so small a cash reserve was largely due to the skill, ingenuity, and labor of Dr. Beech. He not only devoted his own time and enthusiasm to the project, but got others to contribute their particular skills. Previously they had had to rent the grange hall for a dinner; now they had all the pleasure of being in their own building and were able in addition to clear a little money towards the small building debt they had incurred. They even had hopes of selling for $150 the framework of the church they had bought; that would be enough to finish paying for the annex.

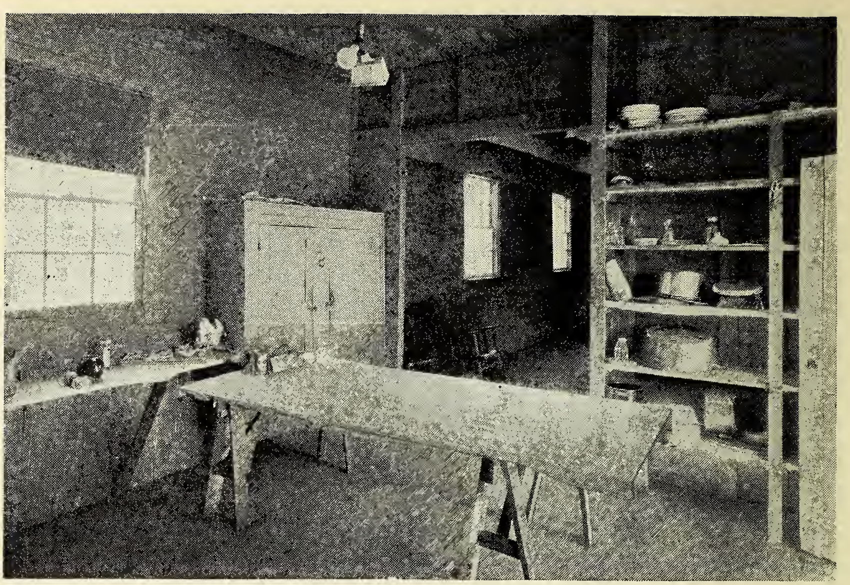
Student classes from the college at X have always particularly enjoyed going to the little church at Kent for a hot chicken dinner. Those dinners still linger in the memories of the students. The chicken was *hot* and the flaky biscuits almost melted in their mouths. Then, too, they met Dr. Beech and the minister and shook hands with the man who made the steam table. On one such occasion the steam table was wheeled into the dining room for cafeteria service.

KITCHENS IN A CHURCH, GRANGE, AND FIREHOUSE

Homemaking students and teachers are coming to understand more clearly the part they can take in improving such community kitchens as the one at Kent, and what valuable class instruction these kitchens can provide. In Beacon, a village near the city of X, the high school homemaking teacher arranged with some church women to have one of her classes prepare and serve a simple supper, with these women and a college class in home management and their teacher as guests. After supper the college students, who had observed the high school students at work, cleared the tables and washed the dishes. Then the entire group — homemakers, high school and college students, and teachers — discussed the results of their observations and made suggestions for improvements in kind and amount of equipment, in arrangement, and in methods of work to simplify both preparation and service.

During the war, with emphasis on food shortages, Victory gardens, and home canning, the use of these community kitchens for canning demonstrations is more than tripled, and in some cases they are being used for the preparation of food for wartime mass feeding. School kitchens, usually better equipped for such purposes, are being used as community canning centers.

It is interesting to speculate on what this wider, more universal acquaintance with such community centers may lead to. Both homemakers and students will no doubt use the schools for more purposes than previously. Teachers will find the church and community house parlors and kitchens excellent laboratories for teaching certain aspects of homemaking. They make excellent entertainment centers. When transportation is once more available, homemaking students and teachers can exchange visits with students from other communities, and such interchange between country and city girls and boys would be both pleasant and broadening. The photographs and captions on the following pages illustrate how community leaders have worked upon specific rooms or buildings to make them more useful to the community.



FIGS. 95 (above), 96. On this and the opposite page are views of a church kitchen before and after it was rearranged. On this page is shown the service end. As shown below, the wide door-opening was narrowed and service openings cut to left and right of it. The shelves have been adapted to assemble salads and desserts. Food passes through this right opening, and soiled dishes return through the left opening directly to the sink. Replacing the trestle table with a long table running the length of the room makes it possible for hot food to travel down it directly to the service windows.

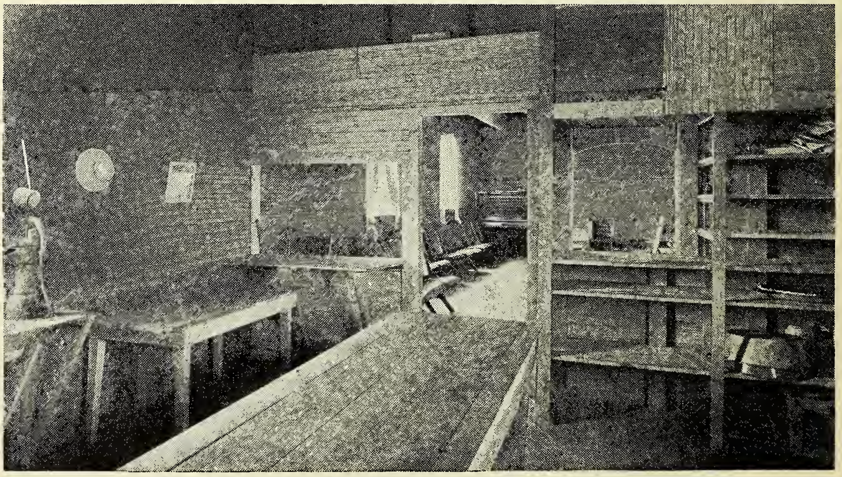
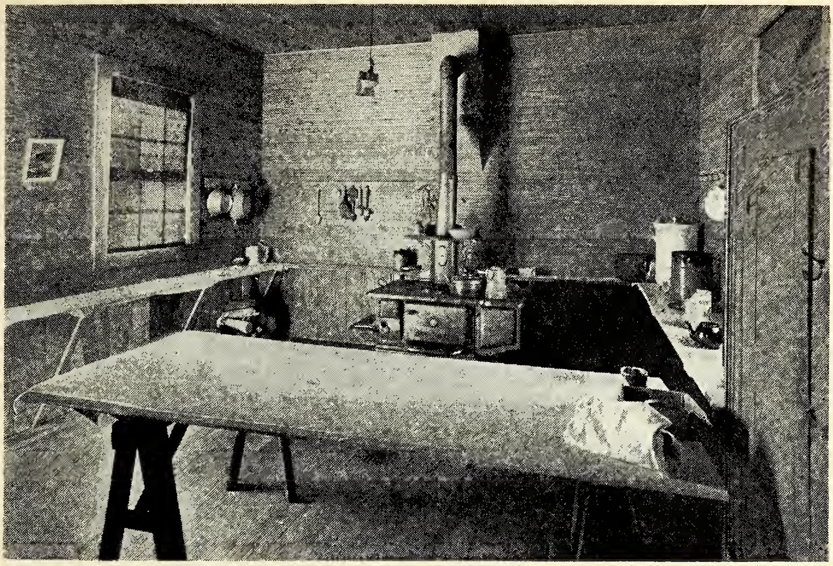


FIG. 96.



FIGS. 97 (above), 98. At the other end of the same kitchen, the stove, as shown above, was completely isolated. There was no adequate space near on which to put hot dishes, and the supply cupboards and shelves were the length of the room away and blocked off by the trestle table. As shown below, a sink and pump, a kitchen cabinet, and an oil stove have been added to the equipment. The dish cupboard was moved from the opposite end of the room to the left of the sink for the convenient storage of dishes, and to be near the new kitchen cabinet and the stove for food preparation.

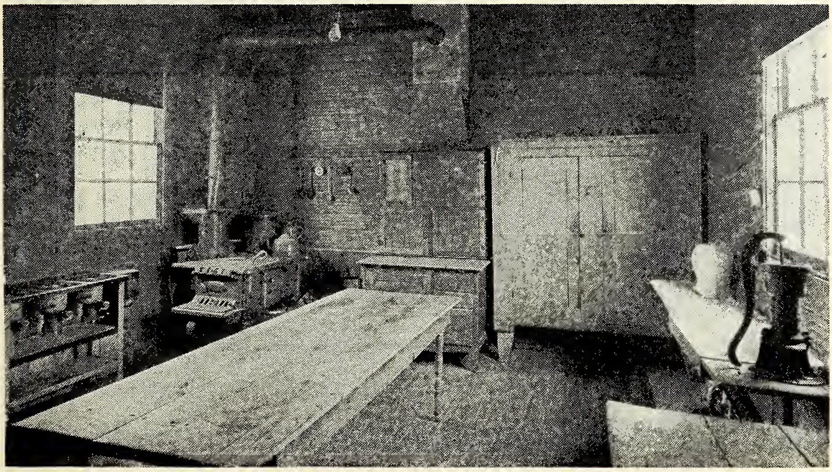
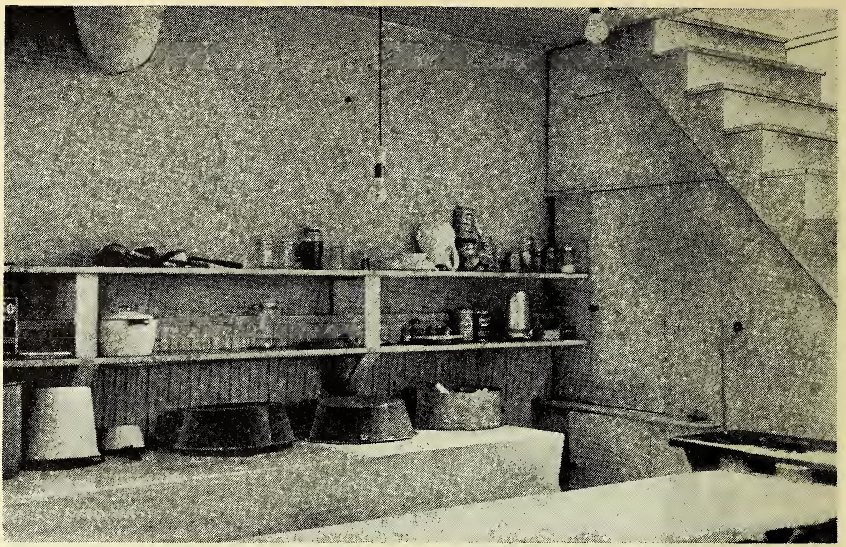


FIG. 98.



FIGS. 99 (above), 100, 101. The grange hall kitchen shown above was rearranged by the members, as shown below. The stairway at the upper right was open, with no guard rail, though it was just above the kerosene stove — an accident hazard.

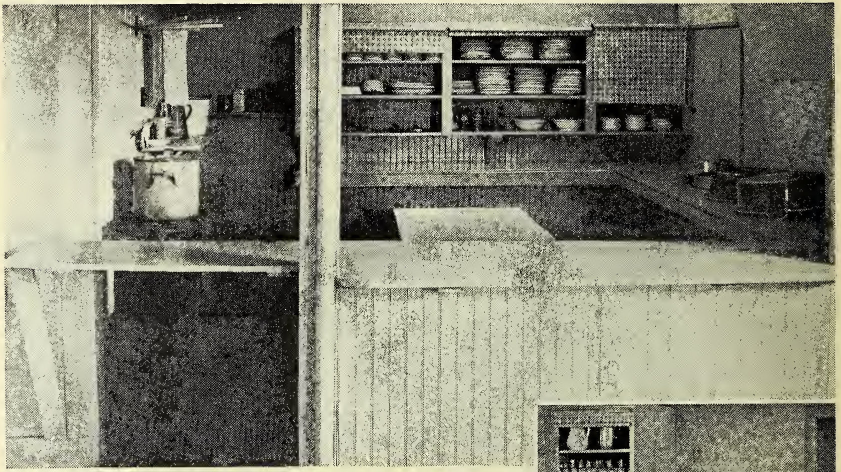


FIG. 100. The stairway was enclosed, as shown. Originally, service of food and handling of soiled dishes overlapped at the right. By moving the stove to the left, food is now served to the counter and the drop-leaf in the door. Soiled dishes come back at the right. Moving coffee to the dining room (Fig. 101) made its brewing a pleasure to all. The two photographs are from *Capper's Farmer*.

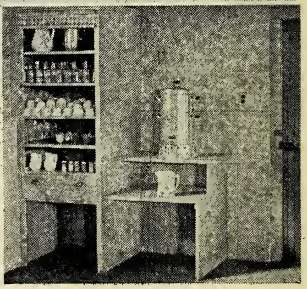
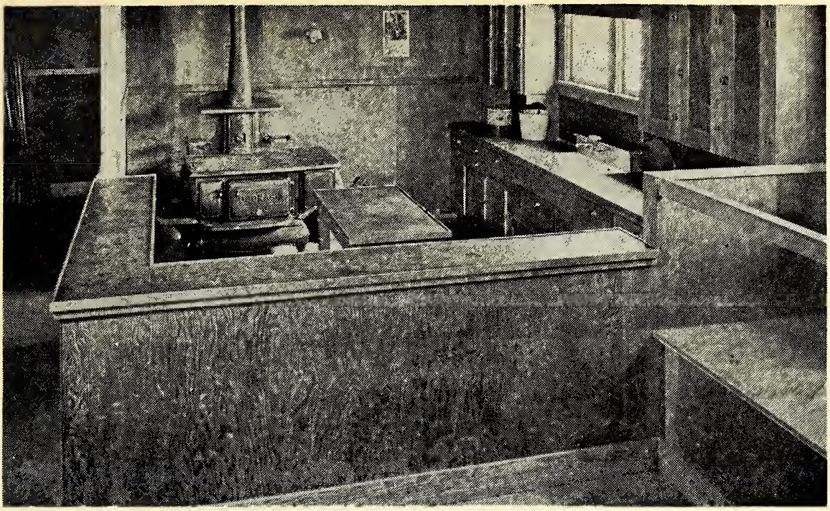


FIG. 101.



FIGS. 102 (above), 103. The Fire House Company built in their firehouse a convenient community kitchen that every one used. The Fire House Committee worked out the arrangement with some suggestions from the Home Bureau group and the home management specialist. Hot food comes from the stove to the counter at the left, while soiled dishes pass to the sink at the right. Desserts and salads can be prepared and placed ready for serving on the shelves under the counter. The wheeled table in the center can be used for preparing, serving, or carrying food. The molding around the counter protects the dishes. The fire engine is surely an added attraction.

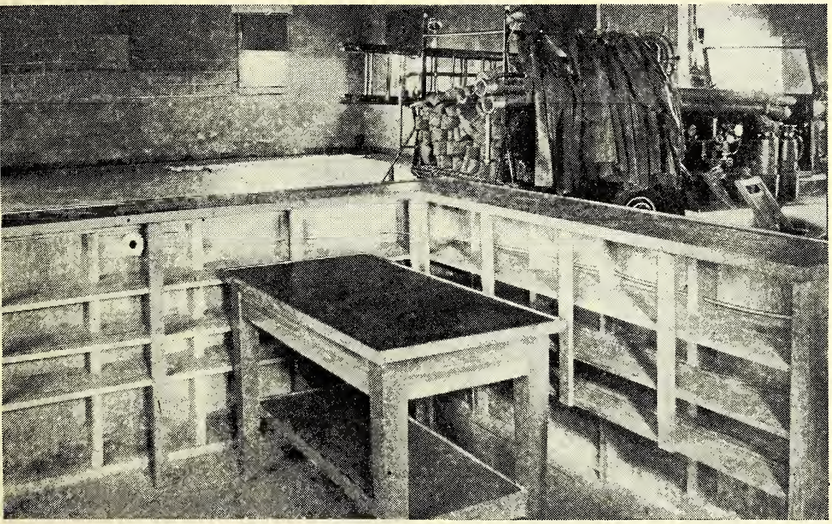


FIG. 103.

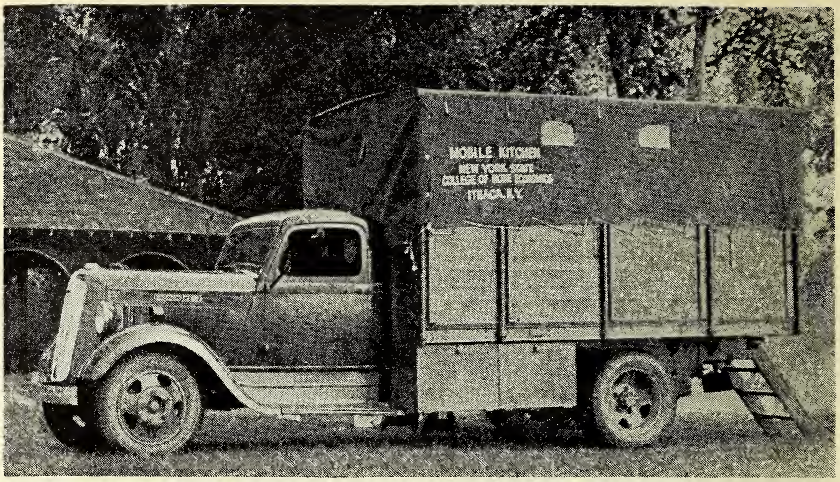


FIG. 104.

A MOBILE KITCHEN

During the war this country sent England mobile feeding units. They cost $2000 each and fed two hundred persons. It was believed that an equally serviceable unit could be built for much less if designed so that a community could use its own labor and materials.

On this and the following three pages is shown a mobile kitchen built on a second-hand 1½-ton truck. It will serve a complete hot meal to one hundred and fifty, or sandwiches and a hot drink or a one-dish meal to five hundred. Cornell students in the Department of Economics of the Household and Household Management and their instructor worked with a staff member from the Department of Institution Management on preliminary plans; the final plans and the supervising of the building and equipment was done by a graduate student under the direction of the Department of Institution Management.* Using new materials the construction cost was $262, exclusive of the labor, the cost of the truck, and the equipment for preparing and serving meals. The truck cost, second-hand, $450; the same construction can be mounted equally well on a trailer. It is thus a relatively inexpensive mobile canteen for Red Cross workers, harvesters, rural schools, extension groups, and the like.

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* Katharine Harris, Ella Cushman, and Margaret Florea, "A Mobile Kitchen," *Cornell Bulletin for Homemakers 522*, 1942.

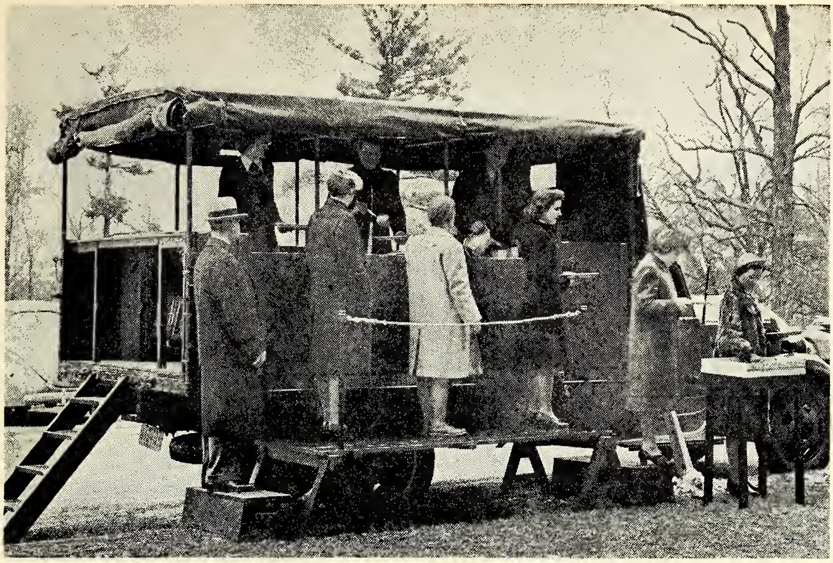


FIG. 105. The mobile kitchen in use. The platform is the tail piece of the truck. The sawhorses, steps, and ladder are stored under or inside the truck during transportation. When it rains, the canvas side can be unrolled, propped up over wooden poles, and roped to the ground to form a cover for the platform. To serve from the end of the truck to persons who are standing on the ground, the ladder can be taken away and the movable counter in the center can be either removed entirely or lowered to within a foot of the floor. A third possible adaptation is to place the tail piece on two table-height sawhorses to form a serving counter. Tanks under the chassis hold liquefied petroleum for the two baker's stoves in the forward end. The kitchen can carry food that has been already prepared, or the food can be cooked in the truck.

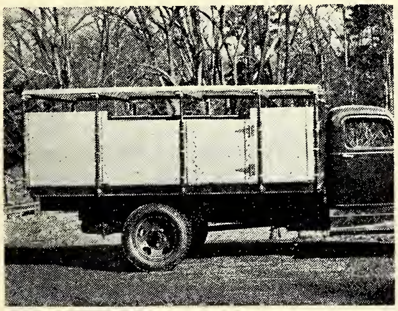
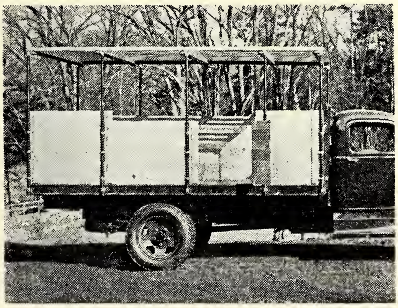


FIG. 106 (above). In Figs. 106 and 107 is shown the build-up of the truck before the equipment was installed or the canvas put on over the slatted top.

FIG. 107 (below). Raised, the top is $6\frac{1}{4}$ feet from the floor; for driving, it can be lowered to 4 feet by telescoping the supporting iron pipes as in Fig. 106.



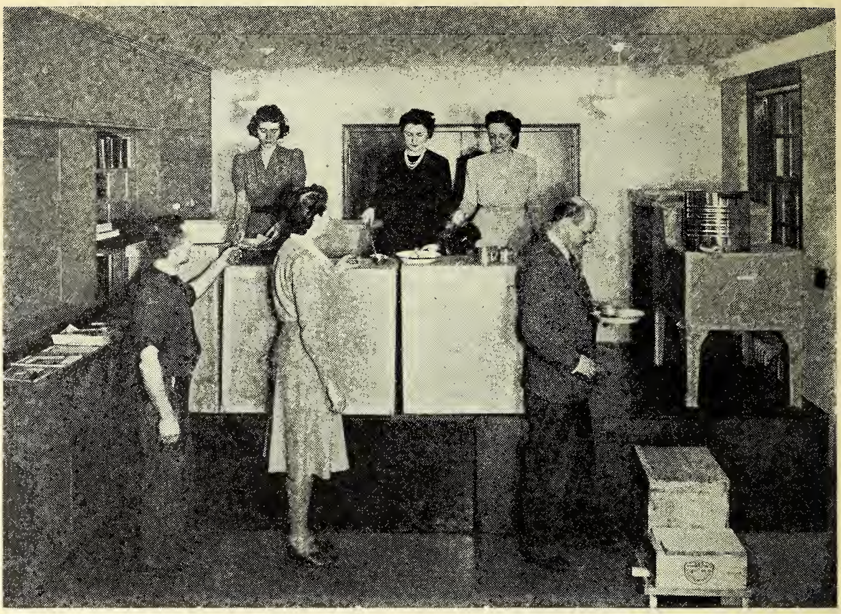


FIG. 108. In planning the mobile kitchen, space the size of the truck was marked off on the home management laboratory floor and cardboard equipment was used to try out different arrangements. The serving was done from platforms to test the distance a person would have to reach to receive his plate. The floor represents the top of the platform on which the patrons stand as they are served, and the steps at the lower right lead them to the ground and show the height of the platform. The routine procedure of serving a meal was gone through to check heights, arrangement of units, and the like. The stove units at the right are in the position of the stoves installed behind the driver's seat in front of the entrance to the body of the truck.

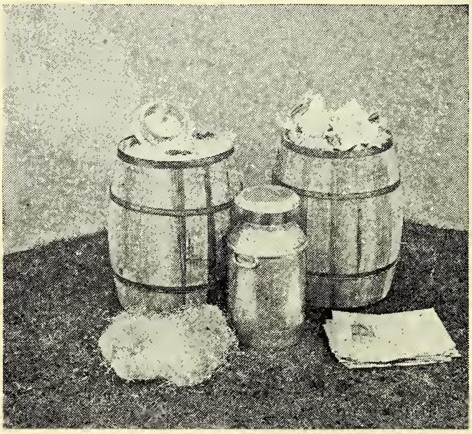
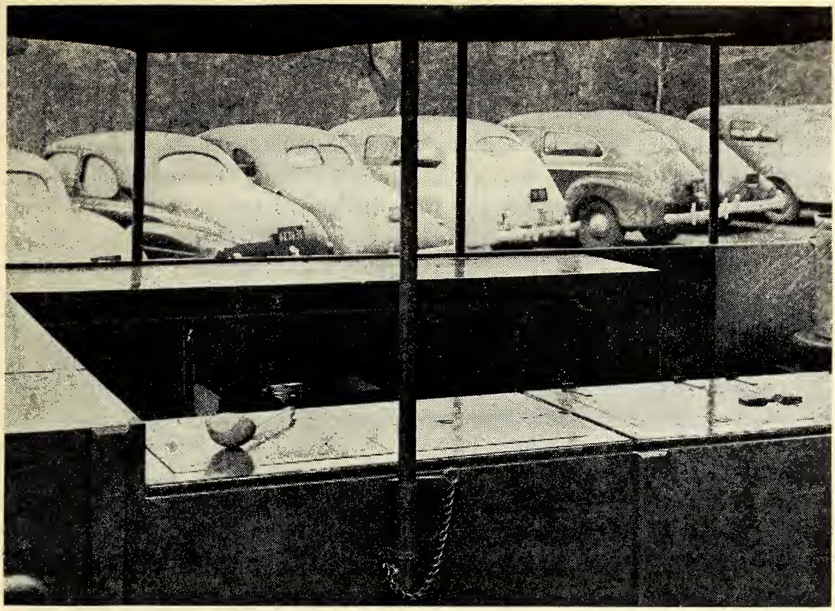


FIG. 109. Barrels and boxes lined with newspaper, excelsior, straw, or sawdust make satisfactory insulated cabinets. To test these, two 10-quart milk cans of boiling water were placed in two barrels lined respectively with crumpled newspaper and excelsior. In a temperature ranging from 18 to 48 degrees F., the temperature in the cans (kept closed) fell overnight at the rate of $2\frac{1}{2}$ degrees per hour. To be safe, cans should be sterile and food kept hot above 125 degrees and cold below 50 degrees.



FIGS. 110, 111, 112. Above is shown the inside arrangement of the mobile kitchen. Below, at left and right, are shown details of the units. On the near side are two insulated chests to hold 10-gallon milk cans in which food can be kept either hot or cold. On the opposite side are drawers for cups, plates, silver, and sandwiches. These units are all the same size and are interchangeable. At the left, a removable counter finishes out a continuous working surface around the truck. At the right, beyond the entrance and behind the driver, are the liquid-petroleum stoves. At the right of the stove is a small sink for washing hands and small utensils; it has a flat, removable cover. Five persons can work comfortably in the truck at one time.

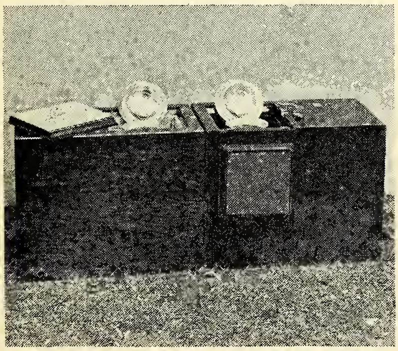
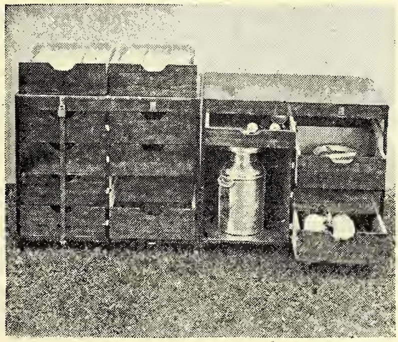


FIG. 111 (above). Ten-gallon milk cans will keep food either hot or cold.

FIG. 112 (below). Drawers hold cups, plates, silver, small utensils, sandwiches.



SUGGESTIONS FOR DISCUSSION AND INVESTIGATION

1. How can a community kitchen safeguard the health of the persons who work in the kitchen and eat the food prepared in it and served from it? In your answer consider facilities for ventilation, good light, dish scalding, clean storage of dishes, and prevention of accidents. How can the placing of individual responsibility and the intelligent organization of preparing, serving, and clearing up after a meal work toward this end?
2. Does your organization serve community meals on a sound, businesslike basis? Who furnishes the food? Who does the work? Are the costs distributed fairly among the whole group? If not, how could this be achieved? For moneymaking purposes, what procedures would need to be followed? How might the methods of preparing and serving community meals differ as the purposes differ? Discuss what procedures you would follow in all cases.
3. As a class or group, plan, prepare, serve, and clear up after a church or other community dinner. Evaluate the results. If you have suggestions for improvement on any of these points, explain how you can make them without seeming to be officious.
4. Consider the public buildings in your community. Which ones have kitchens, dining rooms, recreation rooms, assembly rooms? If an army camp were to be located near your community, discuss what your community could do for soldiers' recreation, entertainment, feeding, and sleeping. Explain what it has entailed in some community known to you.
5. Discuss how limited or extensive the use of public buildings is in your community; how an expansion of their use would be an advantage to your community in peacetime; what the disadvantages would be; what problems would be entailed.
6. Consider the groups of different national origin in your community or some community you know. Explain whether they tend to keep their community life separate; whether such separation helps them maintain (1) personal security, (2) political power, (3) group solidarity; what the disadvantages of such separation are; how the increased use of public buildings for social purposes serving a cross-section of the community might increase mutual class and racial understanding; whether it might increase frictions. Cite examples for your answers.
7. Explain how a greater knowledge of the way other people live might be a help to you in your own home management.
8. Explain how such functions as public dinners, picnics, amateur theatricals, etc., can serve to increase the feeling of "belonging" in the families that participate and what specific contributions they might make to better home management.
9. Discuss the project in the Kent kitchen as evidence of the values of (1) group cooperation, (2) individual initiative. Point out the differences

between home management and community management; the similarities.

10. What are some of the qualities of leadership? Discuss whether the ability to become a leader is inherent in some persons and not in others; whether leadership can be developed, and if so, how. Find out more about this subject. Explain its relation to management, using Dr. Beech as an example.
11. Discuss what were the greatest values of the Beacon project to those who participated. How could you do something similar in your own community?
12. Explain how community kitchens and parlors can be used as supplementary facilities in teaching home management.
13. Discuss whether a mobile kitchen, such as that described in this chapter, might be of value in your community; what agencies might cooperate in building it; what its possibilities in community management might be.

CHAPTER 14

FUNDAMENTALS OF HOME MANAGEMENT

WHAT IS HOME MANAGEMENT?

When homemakers have been asked by extension teachers of home management: "What do you or your neighbors actually do when you manage well in your homes?" the answer almost invariably adds up to: "We use, as well as we can, what we have to get what we want." This is reasonable; women can illustrate it over and over again from their own experience. This definition has therefore been tentatively accepted by extension specialists in New York State and tested in the homes they visit. When families use as well as they can what they have, or can get, to accomplish their purposes, they do seem to obtain a satisfying result and a gratifying sense of achievement.

The Averys, the Bartons, the Duncans, and all the others, what did they do to manage as successfully as they did? They used their ingenuity, their past experience, their common sense, their energy, their ability to investigate and to weigh values, their money, the services of the bank, the material things around them, to get what they valued most — a home. Unfortunately, there are other individuals whose resources are so limited, or even non-existent, often through no fault of their own, that others have to help them to manage or manage for them; and it is right that agencies should exist that can assist in such cases, and it is right that such people should use the offered aid for their advantage. All of these families, each in a different way, *used judiciously the means available toward getting the kinds of homes they wanted.*

It is not the purpose of this book to formalize "rules" for home management. It is, rather, to return to the source, to study actual family management experiences and find out what these families wanted and how they managed to get it. In this way it may be seen that certain procedures are common to these families and to hundreds of others who manage well, and these procedures may serve as guides — principles, if you like — to aid others in managing well in their homes.

Nor is "good," joined with "management," used in this book in any ethical sense. It is not the function of the author to question whether what a family wants is morally good or not. "Good" is here used as "effective" or "successful." It relates to a method of work, not to a moral issue. To be sure, since management is here applied to the family and the family is generally considered an altruistic circle, the ethical overtone to the word "good" is not wholly out of place. But for the sake of convenience, "good management" and "successful management" are used synonymously in this book, with no moral value implied in the word "good." It so happens that the major objective each of these families set for itself would commonly be recognized as worthy. But "successful" or "good" management does not necessarily imply that the values are worthy; a family might decide to become rich at the expense of others, and succeed.

Nor do the minor objectives of a family lead invariably to the achievement of their major values. Mrs. Avery enjoyed people and wanted to entertain frequently and with ease. She also wanted to entertain in style and elegance. This she tried, but found that such formality was impossible if she were to be at the same time a poised and gracious hostess. She therefore abandoned formality for a simpler style of entertaining and achieved what she valued most — hospitality. Mr. Duncan had to relinquish his plan to teach, but attained his main objective — contact with young people. The families in this study that changed their minor objectives did so to achieve values more fundamental to them.

To visit a home for an hour and to be attentive to its atmosphere and surroundings can give a very good idea of what the important values in that home are. If these values are understood, other things will fall into secondary place. To the Averys, the value of their home lay in the freedom it gave all members of the family. They chose cheap dishes and chairs that could grow shabby in comfort, therefore this cheapness and shabbiness could only be judged in relation to the reason for it. The Bartons lived in a poor little house, but the little house paid big dividends in the happiness of seeing their five children healthy and in good schools. Mrs. Karl could have devoted her time to fixing up her house, but to get the farm going seemed to her more important.

In other words, these families all weighed their values and chose the goals that had for them the richest value.

WHAT ARE THE PRINCIPLES OF HOME MANAGEMENT?

When we speak of "good management," we are talking about ways of doing things which diversified experience has shown to be effective in getting what one wants. Upon visiting hundreds of homes extension specialists discovered that where good management was evident certain common procedures were followed. Can we, therefore, abstract from this diversified body of experience the principles, procedures, or common elements that these families, with more or less awareness, used to achieve what they wanted?

They had a goal. All these families had particular goals that were of importance to them. These goals were by no means always the same, but each one was vitally important to each family: the Averys wanted room for individual expansion with the least expenditure of effort in securing it; the Bartons wanted a big family though they could hardly afford it; Mrs. Beale wanted to keep her children in school and still be self-supporting; the Duncans wanted children and association with young people; the Eagans wanted both a big family and time for community activities; the Fales wanted to own their own home, even if a temporary one; the Greys wanted a country home though both would be working in town; the Merrivale Road community wanted to live on the land and have their children grow up with its advantages. These families were all successful in getting the most important things they wanted, and to that extent their management was successful.

They made a plan. These families all had goals which they wanted to attain. Their first concrete step was to make a plan. The plan differed with each family; it grew, and as it grew it shifted and changed. Sometimes it was elaborate, as with the Eagans who made a seven-year plan for home improvement based on spending about $200 a year. No one can doubt that for them to squeeze out such a sum required shaving and paring and contriving, but the plan and the future it opened up gave them both an incentive and a guide. Sometimes it was so faint a plan as to be only a kind of dogged determination, as when the Bartons decided to put their children first and Mrs. Beale moved to the neighborhood of a good school with two dollars to windward. Nevertheless it was a plan; it called for every sort of pinching and work and sacrifice; it required, in fact, more stamina to adhere to it than to plans drawn up by the fireside and backed by money in the bank.

They faced the obstacles. Few of us are so fortunate as to be able to make sweeping plans without knowing there is a catch in them, for ambitions tend to outrun present possibilities. In lesser things we are not so observant. We say, "The trouble is . . ." and usually let it go at that. If all of us would face squarely the things that irritate us most in our daily life, and attack them, family harmony would increase by leaps and bounds. These families recognized the obstacles that stood in the way of their achieving the kinds of homes they wanted. Mrs. Avery saw the use of her good china and linen as an obstacle to the kind of entertaining she most enjoyed; she jettisoned them. Mrs. Barton saw that her strength was insufficient to accomplish her purpose; she sought greater knowledge of labor-saving methods and devices. The Duncans had too little money and too many inconveniences; they attacked the inconveniences. Eve and Mary sat up too late to study because they had no place to study efficiently; they made a place. The Eagans put behind them with one leap any regret that it must take them seven years to see their place shiningly perfect; they extracted a maximum happiness out of each $200. The Greys and the Fales and the residents of Merrivale Road saw that only a good deal of manual labor and the foregoing of many conveniences would give them the homes they wanted in the country.

They took stock of their resources and saw possible ways to overcome the obstacles. Material things are not the only resources. Money in the bank is a very comfortable resource, but not so valuable as health or energy or ambition. Some of these families had sufficient financial resources to realize the major part of what they wanted; others obtained results with no financial backing. Both the Greys and the Karls wanted to own a home; the Greys could count on two incomes and credit at the bank, but the Karls had little more than their strength, courage, and determination. Orange crates and ingenuity were resources that made possible better study habits for Eve and Mary, Jane and Norah. The Eagans had an asset in their ability to do much of the improvement on their place themselves. The Duncans could, on a shoestring, manage university study and a baby, because their families were an ultimate resource. The Neilsons could go into debt because they knew land and its value. All of these families had as resources their wisdom, their experience, their common sense, their energy, their ability to estimate values, their temperament to enjoy the process of doing things, their ability to control or administer — for these things pay their way like money. They used what they had and were getting what they wanted, or perhaps it would be truer to say that they were wise enough to want and to get enjoyment from things possible only by the best use of such resources as they had. They "managed" to make with their resources a home that brought them happiness.

They made investigations so that they would get maximum value for their investment. Should it be a home in the city or in the country? Was the house sound? What kind of washing machine to buy? what kind of stoker? Were available schools good? Would land values rise?

They experimented and tested results whenever possible. Norah and Jane tried more than one idea before they developed the desk they thought the best, then they used this for a week to give it a practical test and to see whether it really did meet their needs. The Greys lived with the little kitchen until they knew beyond doubt that they wanted a big kitchen. The Averys enlarged their dining space gradually as each change proved satisfactory. These tests were not necessarily all physical; quite as effective testing was done in the mind. Mrs. Neilson "lived" with her blueprints; Mrs. Jackson "didn't want to be homesick for that door," so she is still thinking about changing it; the Fales thought through their laundry plans so well that they knew quickly when a change was advisable.

They acted. After these families had visualized their aims, considered the difficulties, taken account of their resources, balanced the possibilities against the obstacles, investigated and experimented, they made decisions and acted upon them.

They evaluated the results. Did the results turn out the way they hoped? If not, why not, and what could be done about it? A home is a fluid thing, and a good manager in it must be adaptable, agile, and alert. A home may not conform to community standards; it may not function in a traditional way; if it satisfies the family it serves, it is successful. The family has managed to make it a home. An abundance of related knowledge and the ability to search out needed facts, coupled with experience in doing this; a willingness to exercise the power of thinking; a cheerful acceptance of the fact that conflicting goals cannot be attained and that a choice must therefore be made; all of these factors contribute to good management.

STEPS IN THE MANAGEMENT PROCEDURE

Values. Consider family and individual values and goals.
Plan. Make a plan of action directed toward achieving these goals or values.
    Obstacles. Become aware of difficulties in or obstacles to the achievement of the goals.
    Resources. Gain knowledge of available resources, human and material, for overcoming these obstacles and achieving these goals.
    Possible solutions. Consider possible way to overcome these difficulties.
    Weighing values. Weigh the advantages and disadvantages of each possible line of action over against the others.
    Tentative choice. Make a tentative choice of one line of action.
    Investigation. Search for information relevant to the line of action chosen.
    Experimentation. Experiment, and work out original solutions when possible.
    Testing. Test or try out the tentative plan when possible.
    Evaluation. Evaluate the results, and repeat the above procedure if results were not satisfactory.
    Final decision. Make a final decision based on this evaluation.
Action. Put this plan of action or thinking process into effect. Re-evaluate the results.
Satisfaction. Look for evidences of satisfaction in the results and in the process of achieving them.

Probably the majority of good home managers do not consciously follow this management procedure, nor are most of them aware that they are following a procedure. It is, however, by a study of what good managers do when they manage that the procedure has been recognized. Even those who are aware of the process do not always follow all the steps nor the order stated, nor would this always be sensible. Its main value is as a guide to those who wish to know an approach that is likely to bring a successful solution to the many important management problems forever before them. It helps to give a feeling of security; it increases the likelihood of security.

CHAPTER 15

HOME MANAGEMENT THROUGH THE CAMERA LENS

Good management cannot be photographed. It is not material; it does not show. It is a process. The photographs of devices and arrangements shown in this chapter are not guaranteed to help all families to manage successfully. They would not fit into all homes. Their greatest value lies in the fact that they have helped the particular families who contrived and used them. They are presented to show others how these families used what they had in clever ways to accomplish something that was important to them. They are a record of what was done with little expense but great ingenuity to make the daily routine of housekeeping easier and more cheerful.*

The sequence of photographs indicates that families differ in their choice of rooms in which to carry on their various activities. There seems to be no one standard place for any given function; it depends on individual preferences and the resources at hand. Some families find a way to segregate an activity in a separate room; some may combine many activities in one room. Laundering is carried on in the kitchen, in a special laundry room on the first floor, or in the basement; ironing is done in the laundry room, in the kitchen, in the sewing room. One woman sews in the playroom, another in the bedroom. Some children play in their own rooms, some in a basement playroom, some in a recreation room shared by their parents, and some in the living rooms. Garages, basements, and bedrooms become workshops. An office shares space as a showroom for exhibits of teaching material, and these are an asset instead of a liability because of their skillful arrangement. A place is found for a planning center if the will is there. Storage spaces can be made anywhere for anything — in cellarways, behind doors, in the wall. Ingenuity? Yes!

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* Figures 114, 117, 118, 119, 120, 170, 187 are reprinted from Ella M. Cushman, "The Development of a Successful Kitchen," *Cornell Bulletin for Homemakers 354,* 1936, 1940.

Figures 135, 185, 188, 189, 190, 226, 227 are reprinted from Clara E. Jonas, "Kitchen Storage Space," *Cornell Bulletin for Homemakers 398,* 1938.

These are records of inconspicuous people, people who were for the most part unaware that they were showing great ability to adapt what they had to get rid of the more unsightly features of housekeeping and to make the more tiring elements of housework less backbreaking. These efforts are particularly praiseworthy because the homemaker has not mourned her lack of streamlined, white-enamel-and-chromium-plate perfection; she has made an odd spot and an indifferent piece of equipment do. She has shut away or made inconspicuous what was unsightly; she has dressed up what must be visible; she has made convenient what was inconvenient. These pictures are a record of a quality inherent in the American people — the rare ability to experiment, to adapt, to improvise.

It is surely not out of place to point out how this ability to improvise has paid dividends to our troops, who have been indefatigable in rigging up small comforts and "secret weapons." From such things as discarded oil drums, pipes, and cans men contrived stoves and bake ovens and showers and washing machines; one was even a live-steam mesh-gear washing machine. Nine thousand miles from the nearest equipment, men drilled a well, using a Japanese cannon barrel flattened into a bit. A complicated diesel oil burner was devised from a Japanese rifle barrel and a piece of pipe. A colonel on Bougainville invented a "flame thrower" of tin cans filled with gasoline and fitted into a mortar. A lone G.I. stopped a Jap attack by rolling grenades down a hill to simulate a mine field. (He got fifty-four.) A Seabee first made the bulldozer a weapon of war by using it to bury twelve Japs and a gun entrenched in an "indestructible" pillbox. Four of our boys took some junk metal and toggled up a front for a tank that would bite, and then plow — inventing the "rhino" that subdued the hedgerows of Normandy. And consider for a moment the contriving done by the men, nearly a battalion, who for nineteen days lived, slept, and ate in their Sherman tanks in plain sight of the Germans 300 yards away; they did "light housekeeping in one pan."

How much of this ingenuity was bred in these boys because they had seen their folks at home "rig up something" to fill a need? These boys, too, used what they had to get what they needed.

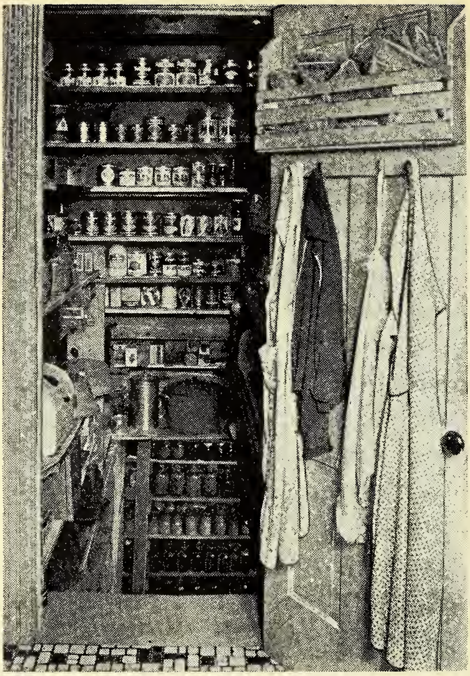
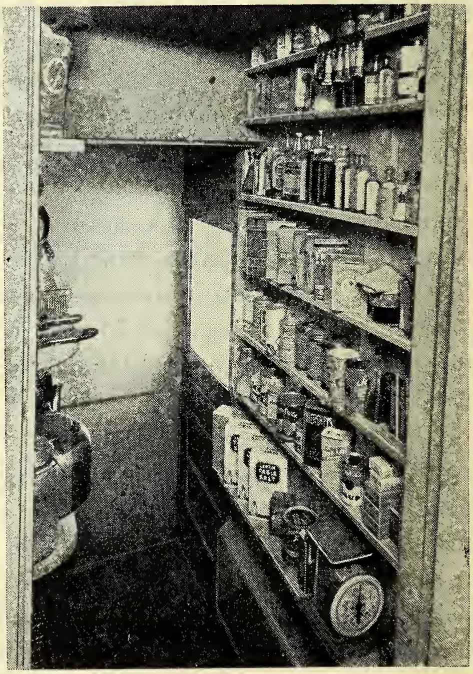
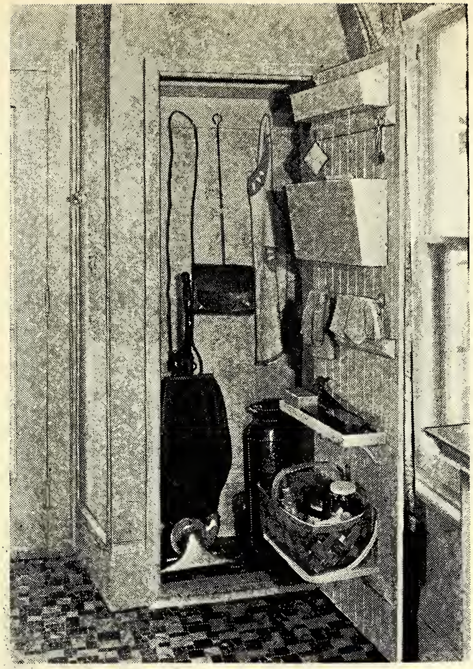


FIG. 113. In this cellarway near the kitchen, a narrow shelf to hold canned goods has been fastened on each stair step to the second floor; the home-canned goods are in the cooler section below. Shelves at the left hold such miscellaneous items as men's extra boots and the large kitchen equipment not often used. The narrow space at the right has been fitted with racks to hold duplicate flavorings; slats across the front protect these from falling out. Even the door has been put to use.

FIG. 114. In the cellarway at the right the reserve kitchen supplies have been turned so that their labels can be easily seen from the kitchen door. On the wide shelves at the left of the stairs are stored the larger kitchen utensils and the bulkier kitchen supplies. This is an illustration of how the narrow space that is so often only the width of the door jamb can be put to good use where space is at a premium. Fig. 122 is another example of use of a shallow space.



. 115. All the space in this
ll cleaning closet is used effec-
ly. The door does a great deal
vork, bringing things within
reach and into the light.
basket for the cleaning sup-
s usually needed together is
ed to fill the space above the
uum-cleaner motor; above
, a tray holds hammer and
s and other small tools, a rod
s dust cloths, and a rack holds
ers. In the top rack, string
hreaded through holes, and
rs hang just below the rack.



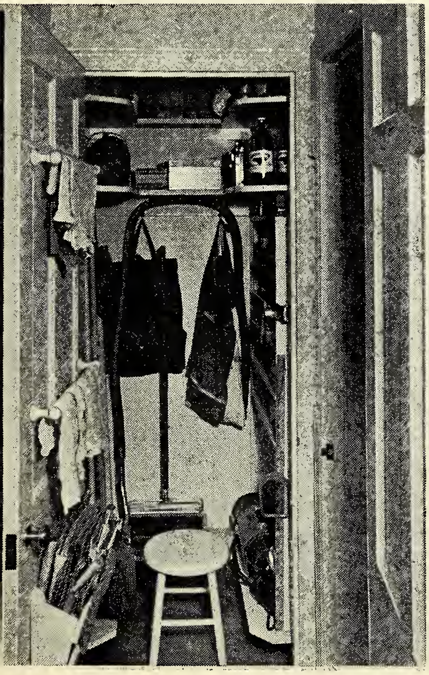


FIG. 116. In this all-purpose storage closet, nothing rests on the floor. Vacuum cleaner and iron are at the right, mops are at the left, and cleaner attachments are at the back. Adjustable shelves at the right hold canned goods. The can opener by the right door jamb is convenient to the kitchen just at the right. As the woman who uses the closet is unusually short, the stool is a necessity, but the closet is so shallow that everything can be reached from the doorway.

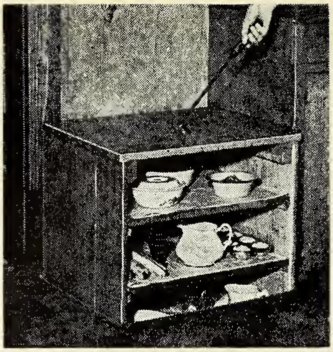


FIG. 117.

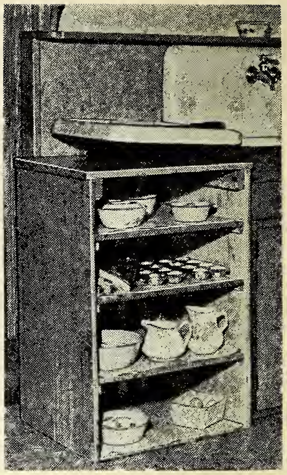


FIG. 118.

FIGS. 117, 118, 119. A farmer built this kitchen dumb-waiter to ease the task of getting food to the cool basement. Operated by pulleys and weights salvaged from farm scrap, it works easily with one hand. The cupboard top becomes the kitchen floor.

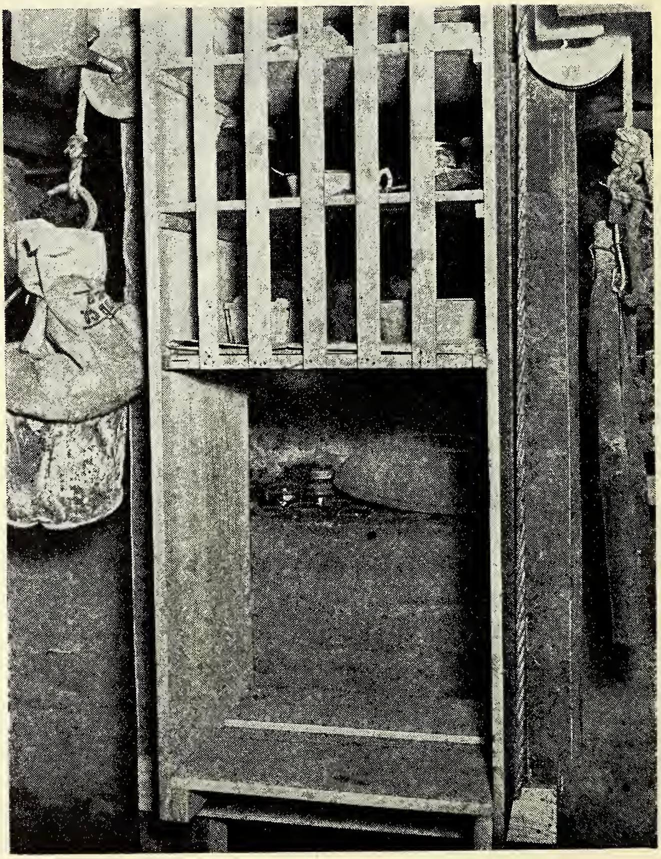


FIG. 119.

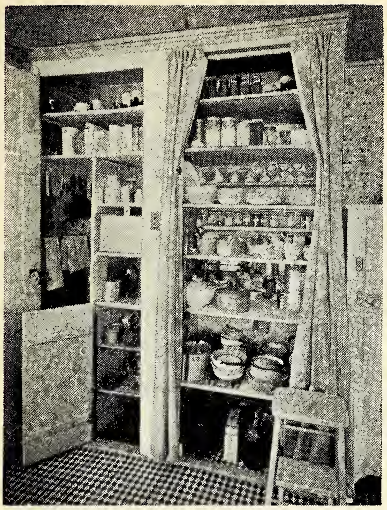


FIG. 120.

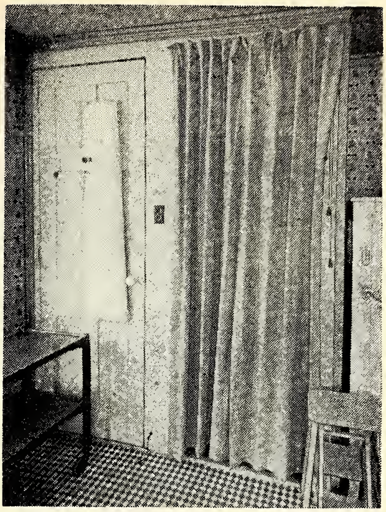


FIG. 121.

FIGS. 120, 121. To enjoy a sunny front exposure, this homemaker converted a front bedroom into a kitchen. The narrow bedroom closet was opened full width and made into a complete kitchen closet. At the extreme left is the compartment for cleaning equipment. The next section is for perishable food supplies. The lower part of this opens through a wire grating into a concrete walled flue in the basement, where it has outside ventilation. There things can be cooled before transfer to the refrigerator, and things which do not require refrigeration can be stored. In cold winter weather the outside opening can be closed to prevent food freezing. The section at the right holds dishes, cooking utensils, and further food supplies. A curtain, held back by metal catches, does away with a large obstructing door. The refrigerator is at the right. In Fig. 121, the door at the left is shown closed. Hinged to it is the ironing board fitted with a slip cover the color of the paint to be inconspicuous; when it is in use, one end of the ironing board rests on a table which is not shown.

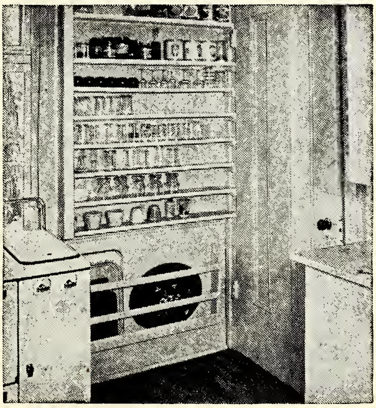


FIG. 122. Where space is at a premium, even the narrow space the width of the door jamb can be used effectively. This cupboard is close to the dining room door.

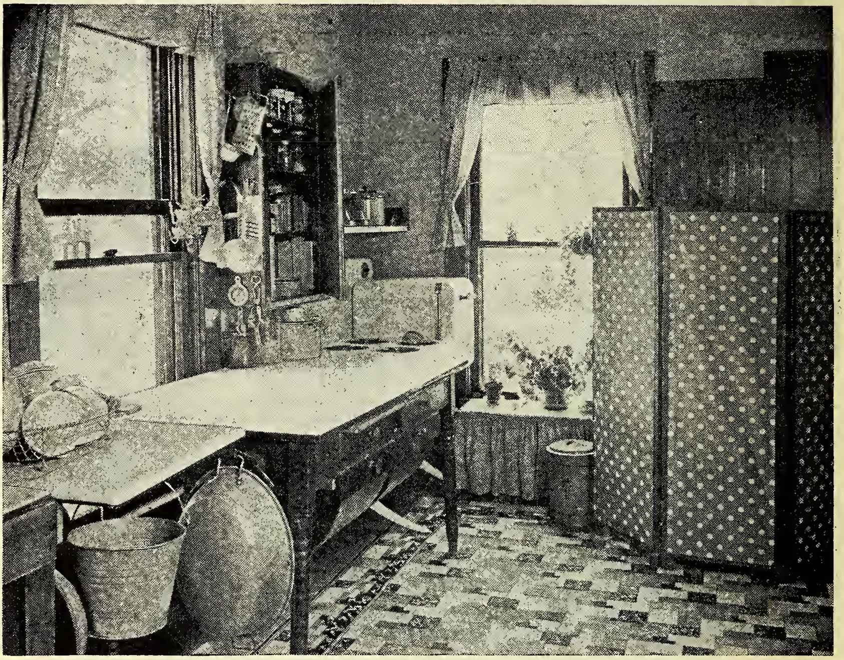


FIG. 123.

FIGS. 123, 124. Consider what the cheerful oilcloth screen on this and the opposite page does for this farm woman who had no place for a laundry and no place for outdoor wraps and heavy farm shoes and gloves. Note how invitingly handy are the warm indoor slippers. The screen performs the additional service of cutting the draft when the back door is opened. The plant shelf is made from an orange crate; its curtain conceals tools and other miscellaneous articles. The mop pail is suspended under the sink so that it does not have to be moved when the floor is swept. The long continuous work surface that extends from the sink at the left to the stove, and the assembly of supplies and utensils at this surface, simplify cooking. Good lighting and good ventilation characterize this kitchen. The curtains, while cheerfully decorative, do not cut off the light, air, or view, or get in the way of the worker. On washday, the washing machine can be moved to a position near both stove and sink.

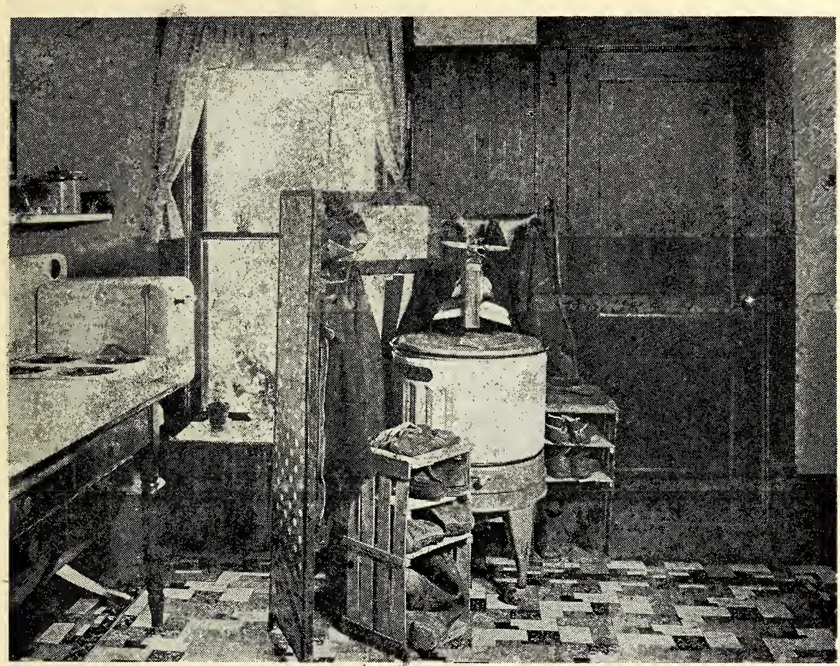


FIG. 124.

FIGS. 123, 124 (continued). Consider also this woman's pleasure in the latest changes in her kitchen of which she writes: "I really wish you could see my kitchen now, for you would hardly recognize it. . . . We have an electric water heater in the cellar and my washer is down cellar, and I have an electric refrigerator where the washer was. I figured out an open cupboard with hooks and shelves that extends part way over the refrigerator and back to the wall. It is made of plywood. So the men still have a place for wraps. I use one side for my things, broom, etc. I had the carpenter build my mixing cabinet down to the floor, which gives me two drawers and two cupboards more. He made new plywood doors, and with new chrome hinges and black and chrome handles it looks quite modern. I made an electric lamp over my sink from the handle of an old milk dipper. I screwed one end of the milk dipper to the window casing and put the lighting fixture into the other end. I painted it black."

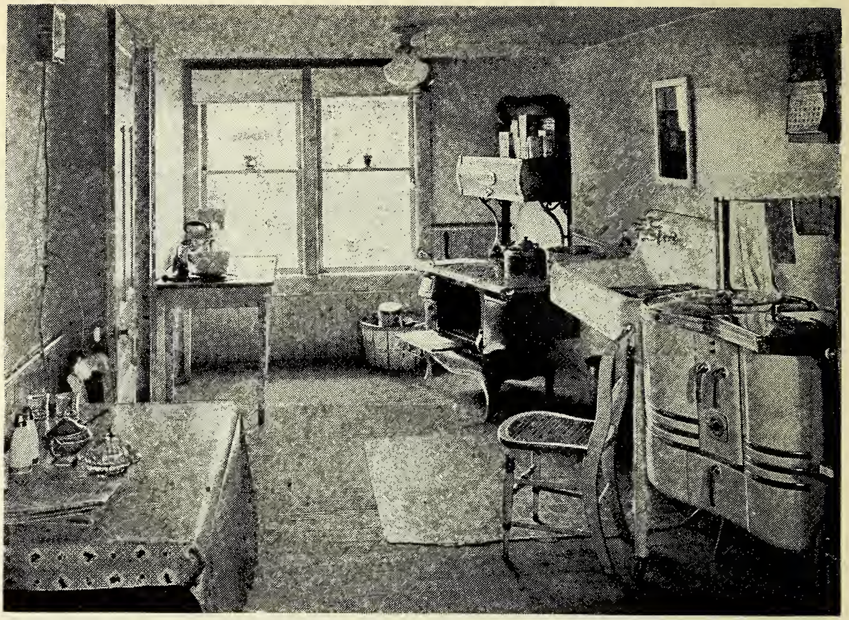


FIG. 125. One end of the original kitchen shown on this and the following three pages.

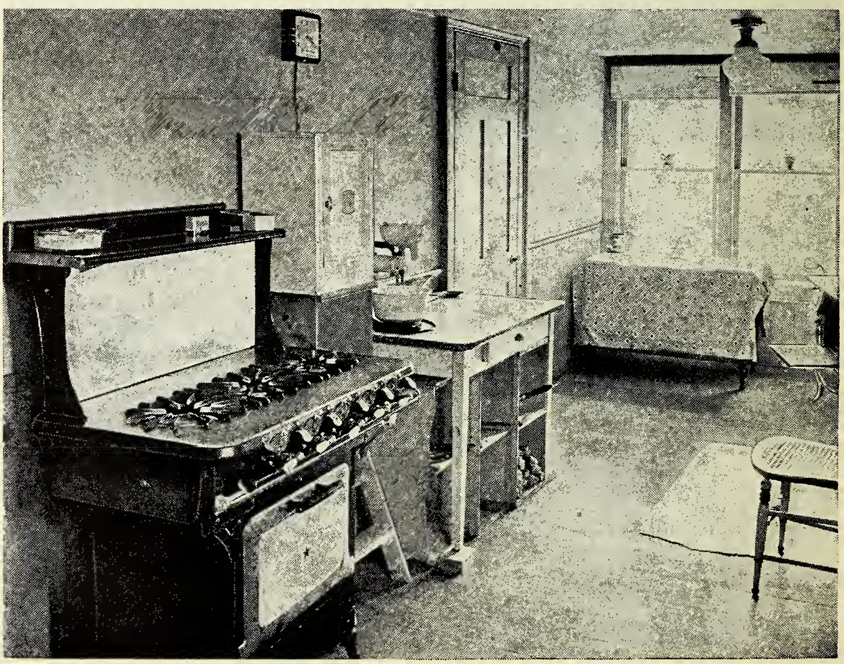


FIG. 126. The homemaker has started reconstruction, as described on the opposite page.

FIGS. 125–130. The homemaker whose farm kitchen appears on these facing pages and the following two pages had a problem kitchen. It was 8 by 24 feet, and meal preparation involved a great deal of walking. Before buying the new labor-saving equipment she was planning on, she wanted to work out the best room arrangement. At the top of the opposite page is one end of her original kitchen, and below is shown the homemaker's own start toward its rearrangement. She brought in her gasoline stove; eventually the wood stove is to be removed and furnace heat supplied to the room. Beside the gasoline stove, she placed a makeshift cabinet to test its usefulness there. It has brought her mixing and cooking closer together, although she still has to go to the far end of the room, shown on the following page, for utensils and supplies.

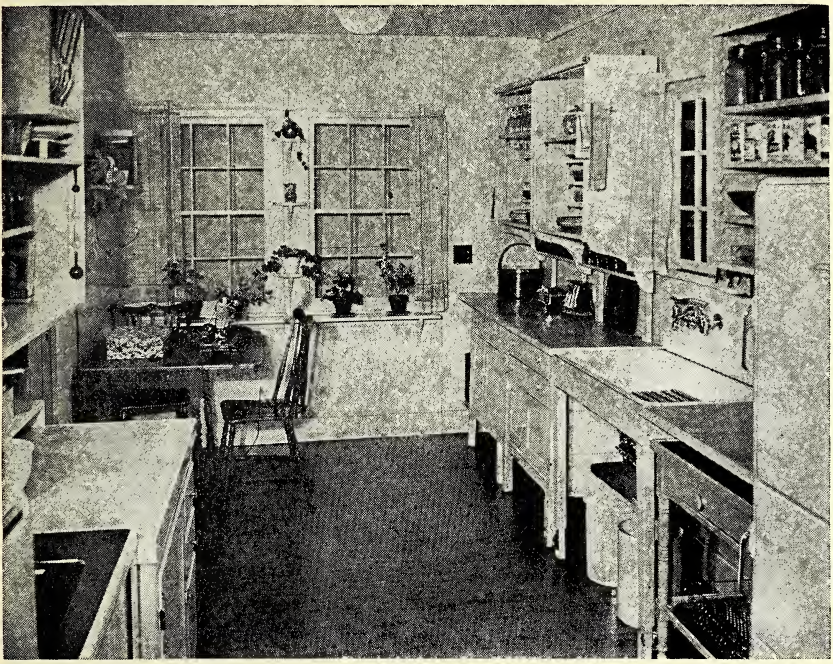


FIG. 127. Above is the same end of the kitchen, as set up in the home management laboratory. A home management class carried cardboard equipment to the farm home and held a kitchen conference there. Later the future kitchen was set up with wall panels, as shown, and kept as an exhibit for a year in the laboratory. Because of the limited size of the laboratory, it was $1\frac{1}{2}$ feet shorter than the home kitchen. Washstand cupboards (much used in setting up these exhibits) have been placed together with a common counter, and the service cart made from a washstand runs under the counter at the right of the sink and by the refrigerator. Above the long counter are dish cupboards near the breakfast table and close to the dining room door. The cabinet at the left next to the stove has been kept, and cupboards have been added above it to hold the utensils and supplies used at the stove. Because the other end of the kitchen was dark, a window was set in over the sink. The opposite end of the room, where all supplies were originally kept, appears on the following two pages.

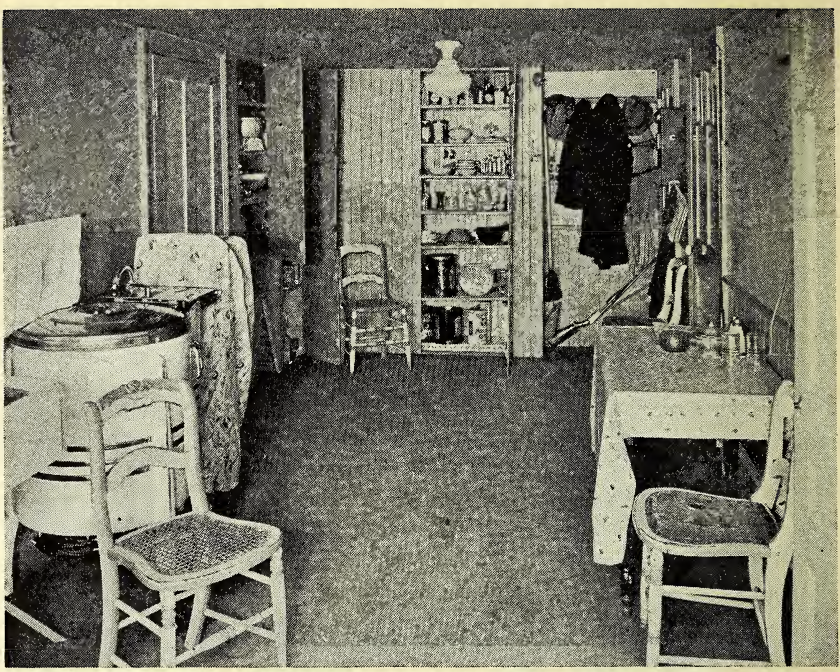
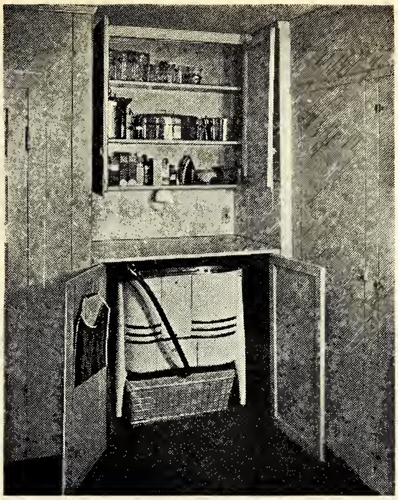


FIG. 128. The opposite end of the original kitchen shown in Fig. 125. The plan for its reconstruction, as set up in the college laboratory, is shown on the opposite page.

FIGS. 128–130. Above is the other end of the kitchen shown on the two preceding pages. Beyond the washing machine is the ironer under a slip cover, beyond that is the back door, and at the end is a wide cupboard with a deep open space below. Opposite the camera is the cupboard for dishes, supplies, and utensils; this cupboard, the only one for both cooking supplies and dishes, was the length of the long room away from the stove and the table for food preparation. In the exhibit kitchen, Fig. 130 on the opposite page, this cupboard has been made into two closets, one for wraps and one for cleaning supplies. A rack for vacuum cleaner accessories is on the left door. The lavatory installed beside the door to the dining room makes it possible for the men to come in, hang up their coats, wash, and go into the dining room without getting in the way of the cook. The deep cupboard in the corner houses the washing machine. In the home this cupboard will be wide enough for the ironer, whereas the laboratory floor was, unfortunately, $1\frac{1}{2}$ feet too short to show this. A window in the back door would still further lighten this end of the room. Progress toward setting up this kitchen in the home has been made, but the war has delayed it.

FIG. 129. In the home, this corner cupboard is a foot and a half larger, and will take the ironer beside the washer. It is the corner section of the cupboard at the left of the supply cupboard in Fig. 128.



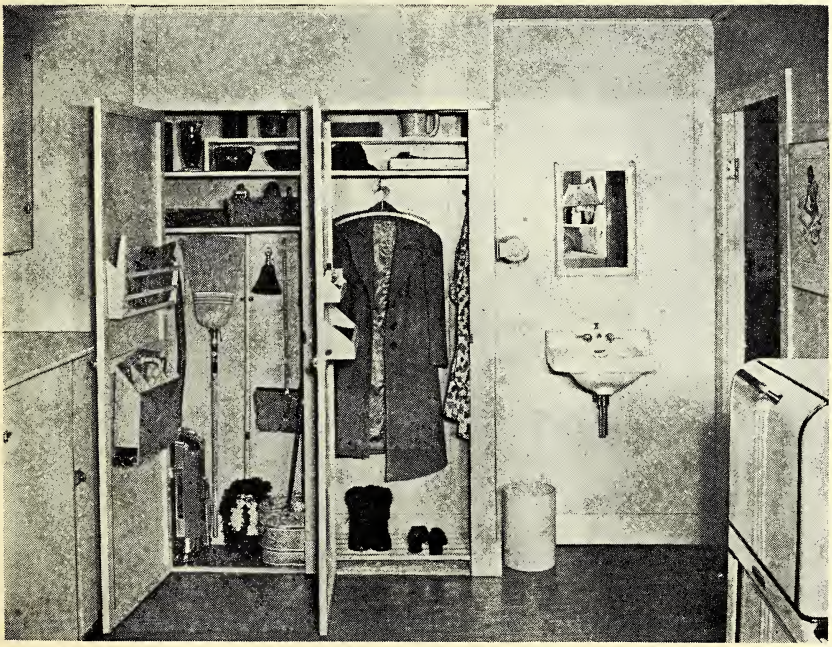


FIG. 130. The original end cupboard shown in Fig. 128 has been divided into two closets; one is for cleaning things and infrequently used jars, and one is for wraps.

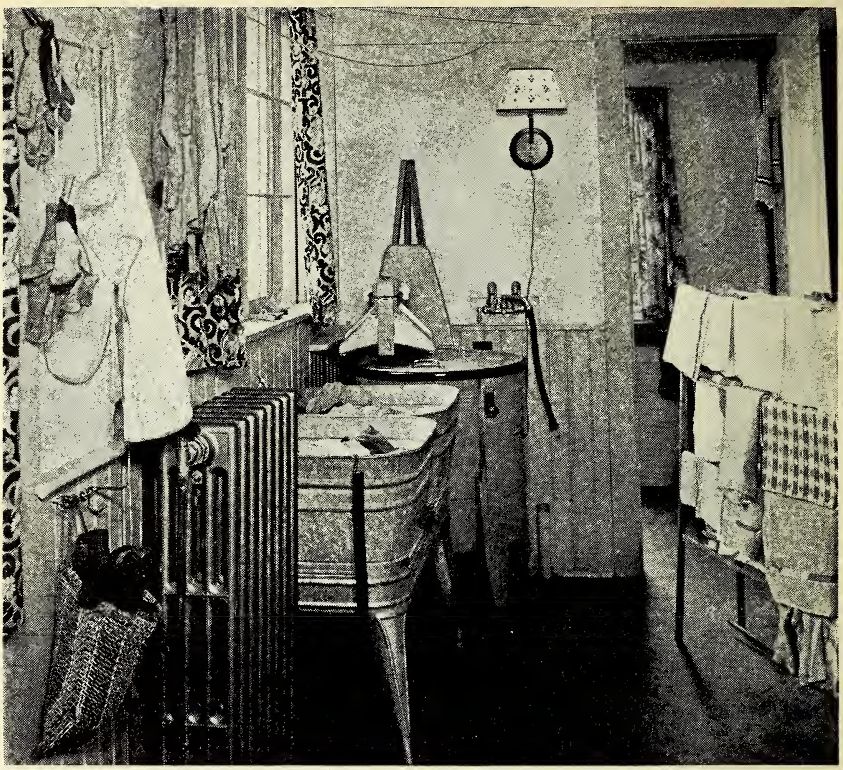


FIG. 131. To get the laundry work out of the kitchen, a laundry adjoining the farm kitchen was made from a portion of the old woodroom. The children's snow-covered winter clothes are dried here, and with the lavatory beyond, the family need not "wash up" at the kitchen sink. Notice the gloves clothes-pinned to a cord to dry.

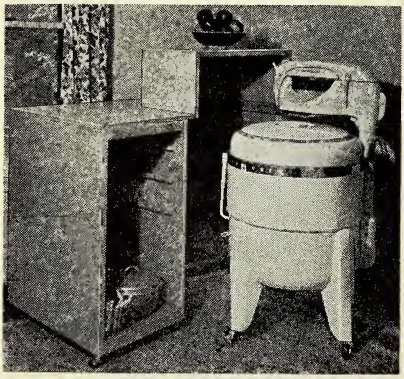


FIG. 132.

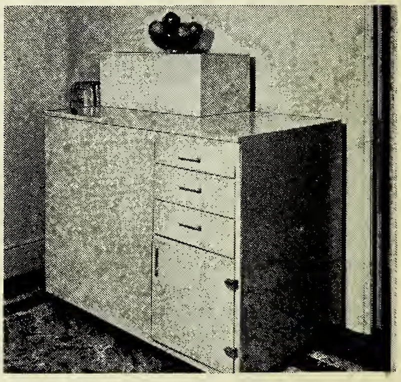


FIG. 133.

FIGS. 132–133. This plywood cover was built for a washing machine in a small kitchen. It provides additional kitchen work surface, three drawers, and a cupboard.

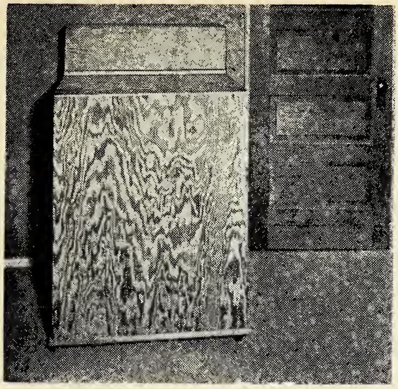


FIG. 134.

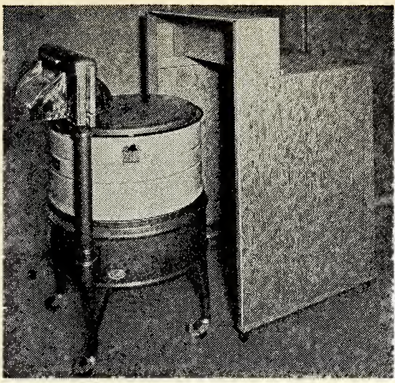


FIG. 135.

FIGS. 134, 135. This plywood cover, shown here over a washing machine, is widely adaptable. One was made with a bookshelf on top and a drop leaf in front to form a desk. Another adaptation was a sewing machine cover with narrow shelves, hooks, and pockets inside for sewing equipment. On page 87 is an elaboration of the idea.

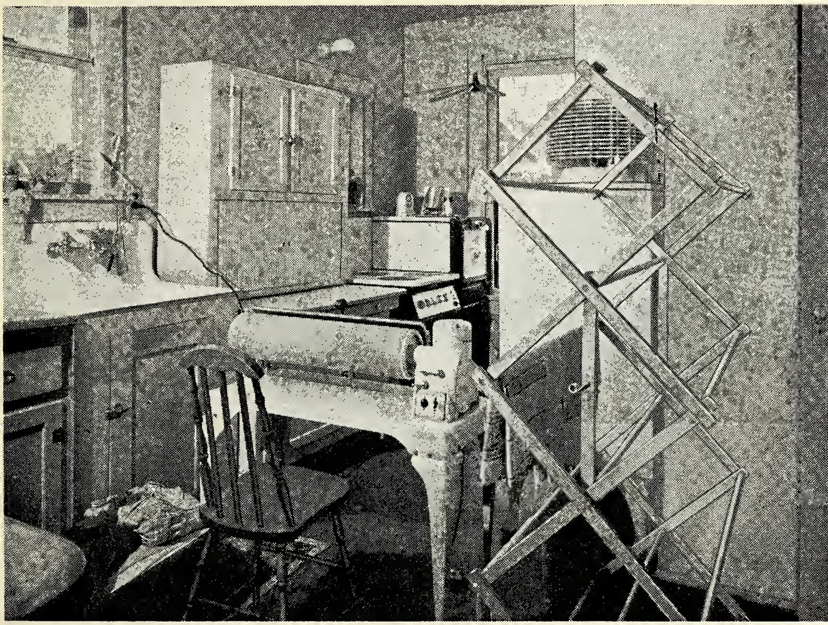
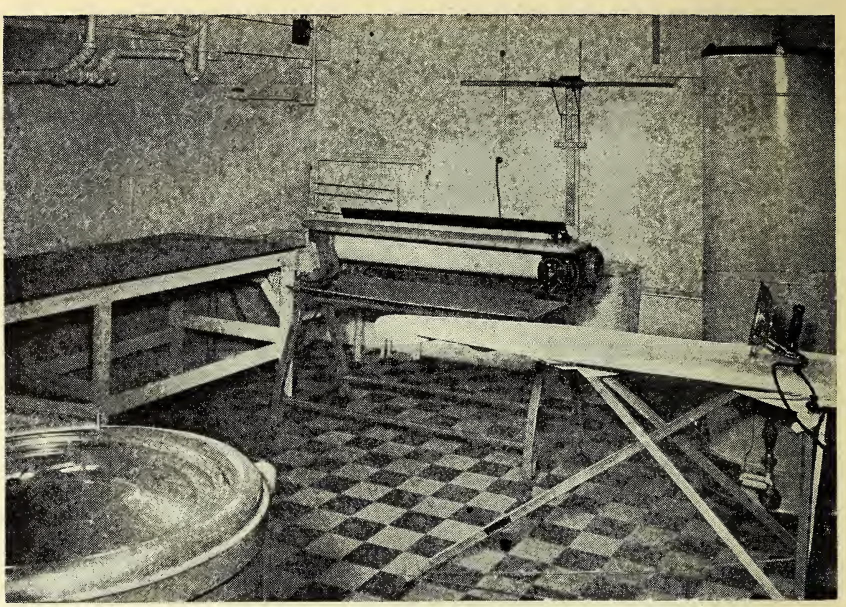
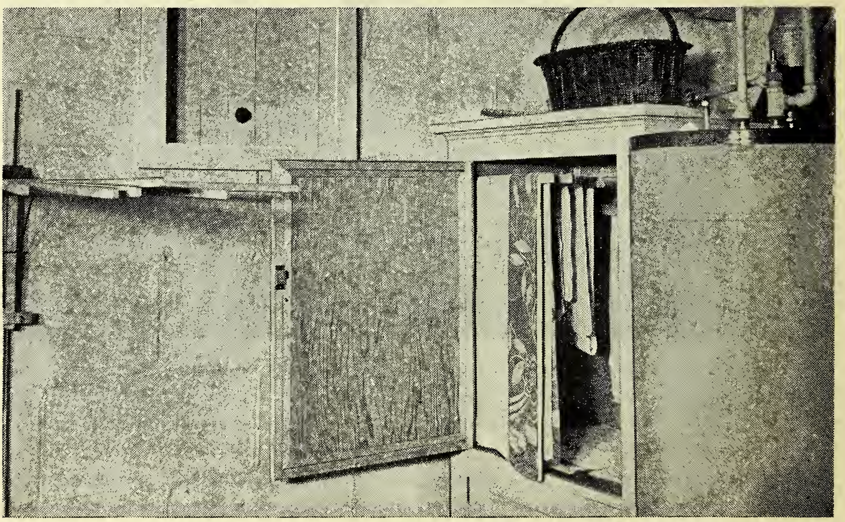
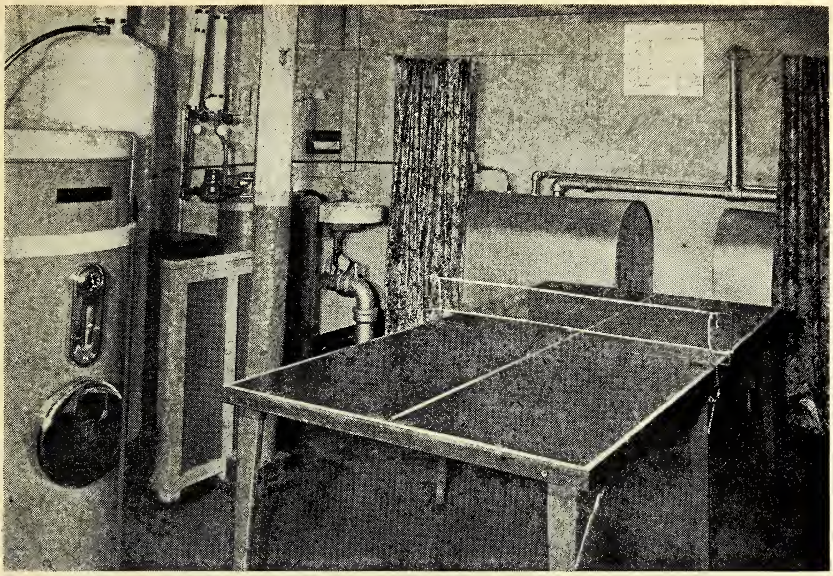


FIG. 136. A tiny kitchen was enlarged as shown by removing the partitions between kitchen and closet and kitchen and hall. Most of the kitchen proper is in the former closet, with range and cabinet on one side facing refrigerator and table on the other. The electric ironer is stored under a counter (corner just visible) at right angles to the sink wall; when moved out as shown, the homemaker has a light and convenient place to iron, with her unironed clothes at the left and collapsible rack at the right.

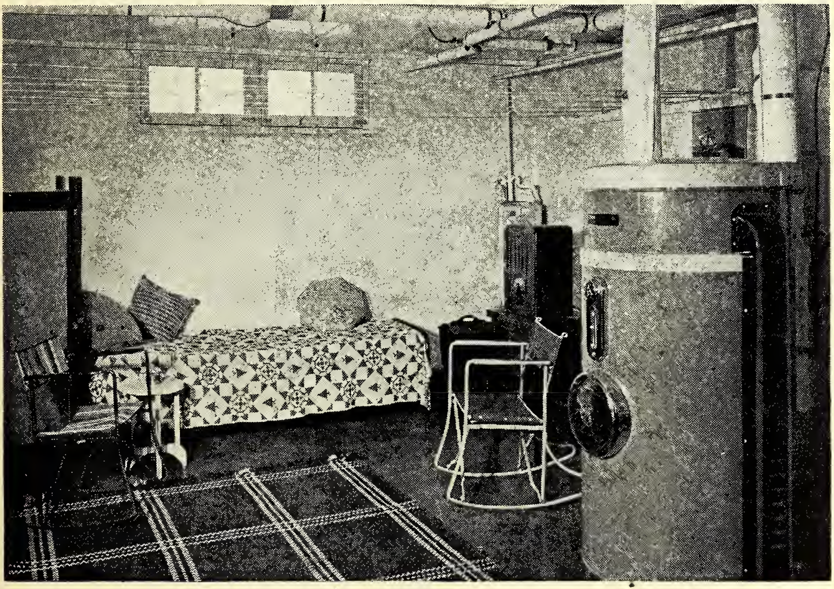


FIGS. 137 (above), 138 (below)–140. On this and the opposite page are two rooms of a basement where furnace and laundry have not prevented the making of a recreation room. The washer is of the spinner type, so clothes dried in the end of the room shown in Fig. 140 do not drip. This is a well-equipped laundry; the sorting table in particular is of admirable length and width. Adequate provision is made for ironed clothes near the ironer; the rack in the corner can be brought forward, and behind the water heater is a built-in closet (Fig. 138, below) where flat ironing such as table linen can finish drying smoothly and stay unwrinkled and out of the way till wanted.





FIGS. 139 (above), 140 (below). The room on this page adjoins the laundry room shown on the opposite page. Besides its advantage as a recreation center, it solves the problem of what to do with porch furniture in winter. At the left of the lavatory shown above is a water softener. The fuel tanks for the furnace, not undecorative in themselves, can be shut away behind curtains. The ping-pong table can be moved out for expert back play, or folded away when the space is wanted for other purposes.



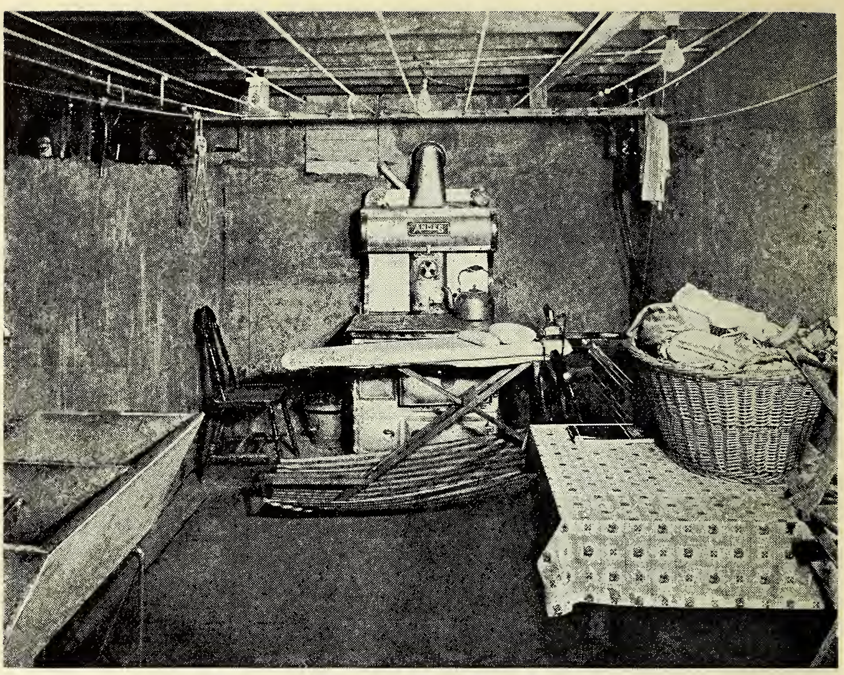


FIG. 141. Above is shown the way one ingenious woman got the laundry out of the kitchen into what was once a cistern in the basement. The room is 17 by 8 feet, and has no outside window but ventilates into the adjoining basement at the top of the partition at the left. The coal stove was brought from the kitchen, where its place was taken by an electric stove. An electric ironer is beyond the table at the right. Overhead lines give ample drying space. The hammock below the ironing board is the woman's own invention for keeping long pieces off the floor. Formerly, she washed in her kitchen and carried her clothes up two flights to the attic to dry.

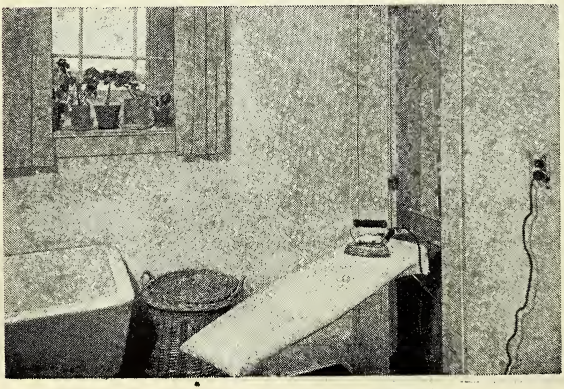


FIG. 142. The swivel device, by which an ironing board can be swung away from an awkward corner, snaps firmly into place in several positions.

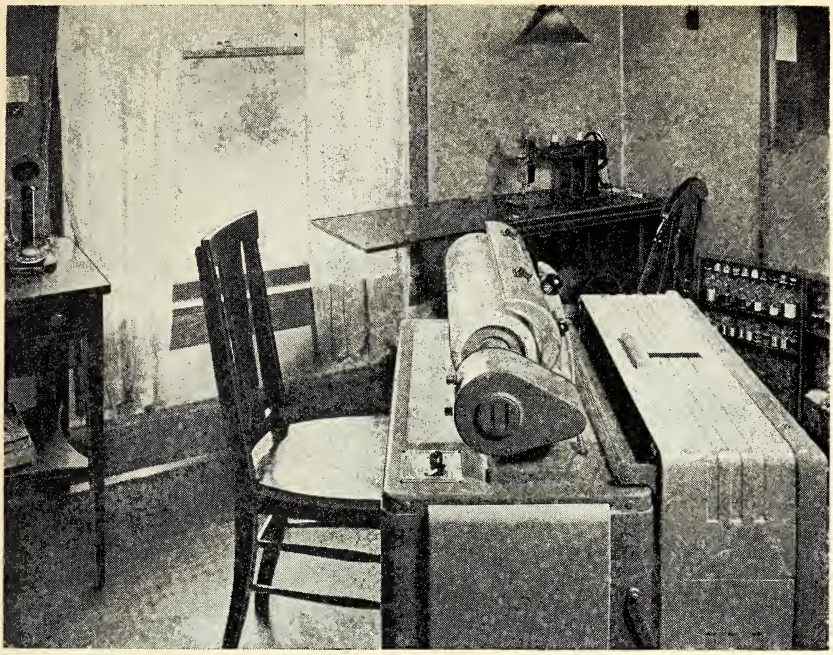


FIG. 143. In a home in which four children have grown up, this room shows one stage in its evolution from an office, through a play room, a work room (as shown), to an office again. At the right (not shown) are the ironing board and rack and the hamper for unironed clothes. The small folding sewing screen can be closed, hooked, and carried by its top handles to another room. By having both ironing and sewing equipment in the same room, the homemaker can iron and mend with the minimum handling of the clothes. She can close the door on her unfinished work and pick it up where she left off without wasting effort putting it away and getting it out again.

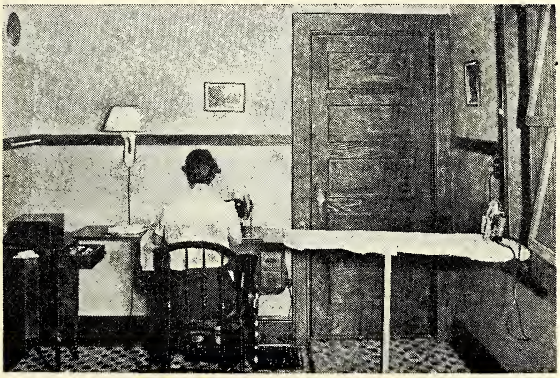


FIG. 144. A sewing and ironing center in the end of a kitchen. The pin-up lamp throws adequate light, from the left, on the homemaker's sewing.

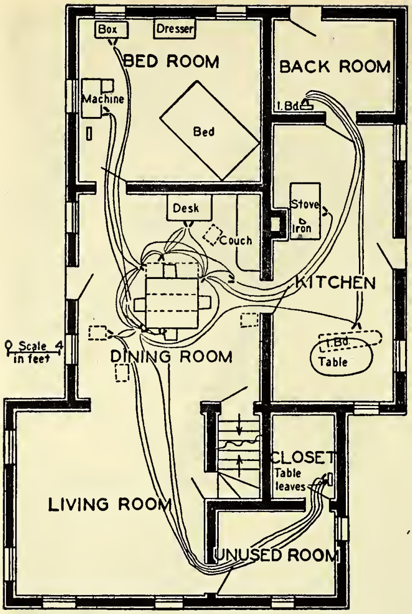

Box
Dresser
BED ROOM
BACK ROOM
Machine
Bed
I.Bd
Desk
Stove
Iron
Couch
KITCHEN
I.Bd
Table
Scale 4 in feet
DINING ROOM
CLOSET
Table leaves
LIVING ROOM
UNUSED ROOM

FIG. 145.

FIGS. 145–150. The illustrations on this and the following three pages show the evolution of a sewing cabinet.* Figs. 145 and 146 give the plan of a farmhouse in which the homemaker did a great deal of sewing. The woman was a clothing leader in the county extension service, and also sewed for the neighbors. The greatest inconveniences which she felt in her work were clearing the dining room table, walking through two rooms and reaching behind a door to get a table leaf, carrying the table leaf to the dining room table, adjusting it, moving four dining room chairs, walking through two more rooms to get the ironing board, and carrying it to the kitchen. Fig. 145 shows her travel, first as she assembles her sewing equipment, then as she cuts, makes, and presses a kitchen apron, and finally as she retraces her steps to replace her equipment.

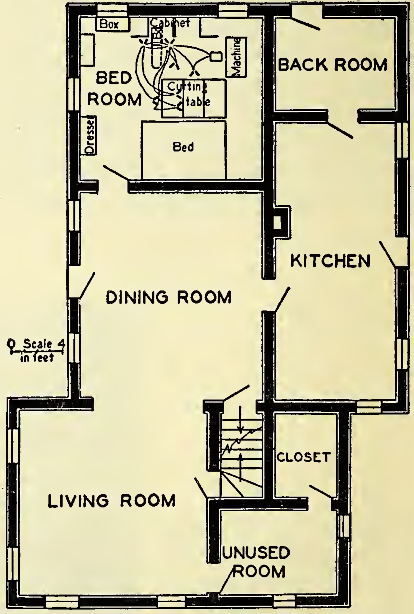

Box
Cabinet
Machine
BED ROOM
Cutting table
BACK ROOM
Dresser
Bed
KITCHEN
DINING ROOM
Scale 4 in feet
CLOSET
LIVING ROOM
UNUSED ROOM

FIG. 146. At the right is shown her travel in performing the same task when all sewing equipment is assembled in the sewing cabinet. Using the cabinet has saved her 639 feet of travel and the attending annoyance of upsetting the dining room and of having to get up to press a seam or hunt for shears she laid down and forgot.

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* Selected from Ella M. Cushman, "Organization of the Sewing Center in the Home," *Cornell Agricultural Experiment Station Bulletin 492*, 1929.

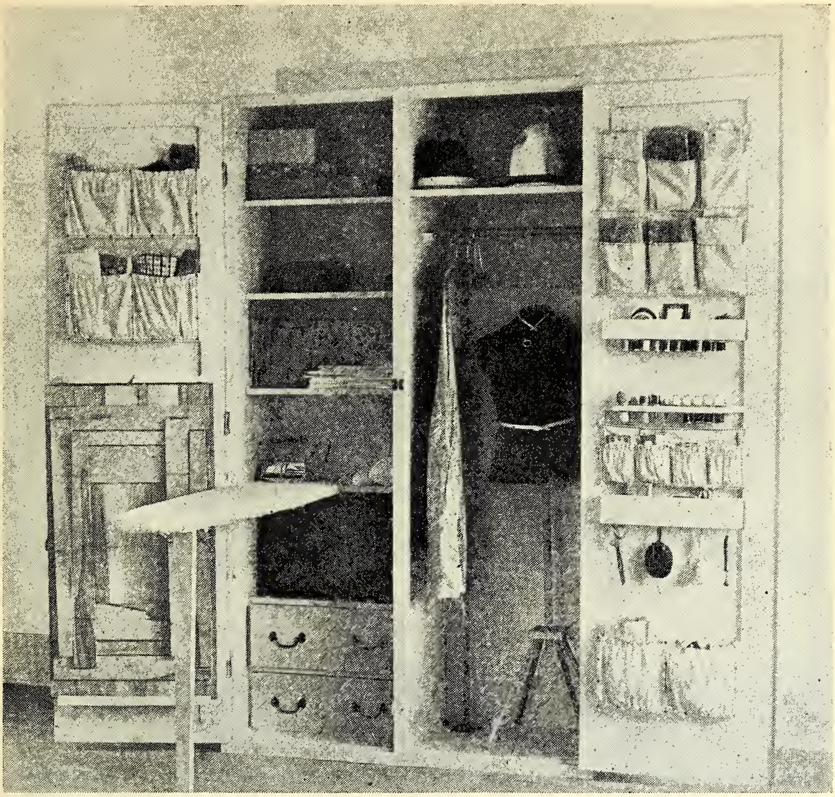


FIG. 147. This sewing cabinet was designed by a graduate student in home management and exhibited in a Better Homes exhibit and later at the state fair. It was thoroughly tested in the home of the woman mentioned on the preceding page. It stood in a large bedroom between two windows, and the machine could be placed so that light from one window came from the left of the worker, with the equipment on the right door of the cabinet within reach of her hand. She used the cabinet all summer, and while doing so kept track of inconveniences and wasted motions and made suggestions for eliminating these. She found the one-piece wooden cutting table shown on the left-hand door heavy and hard to set up, and suggested a lighter table. She also suggested that the cabinet should have a mirror on the door. Another essential piece of equipment that was lacking was a tray of small sewing equipment that could be carried to the cutting table or the sewing machine. She needed a scrap bag as well. A graduate student took these suggestions and worked out the cabinet shown on the following two pages. In particular, the table was made lighter at the same time that it was made four times as large, and a mirror was inserted in one door.

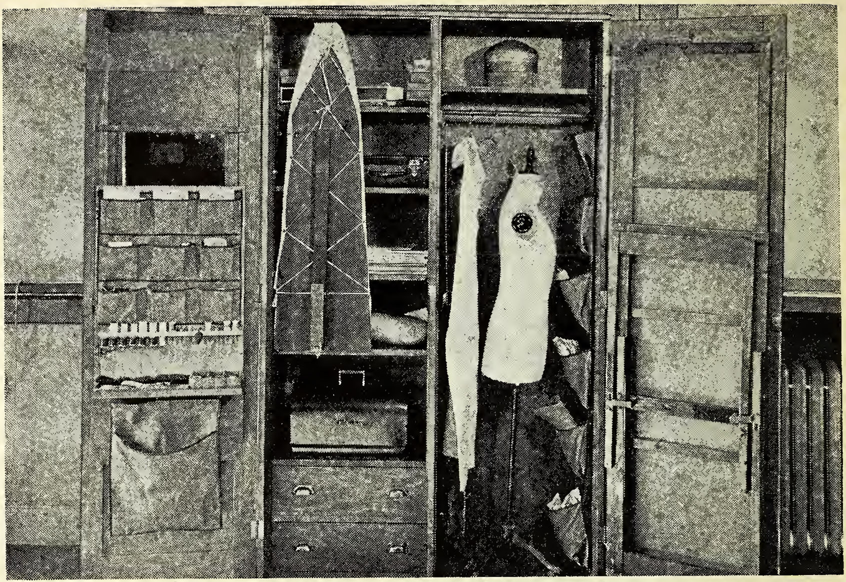


FIG. 148. The improved cabinet has a larger, lighter table on the right door and on the left door an equipment board that swings away from the mirror, as shown below.

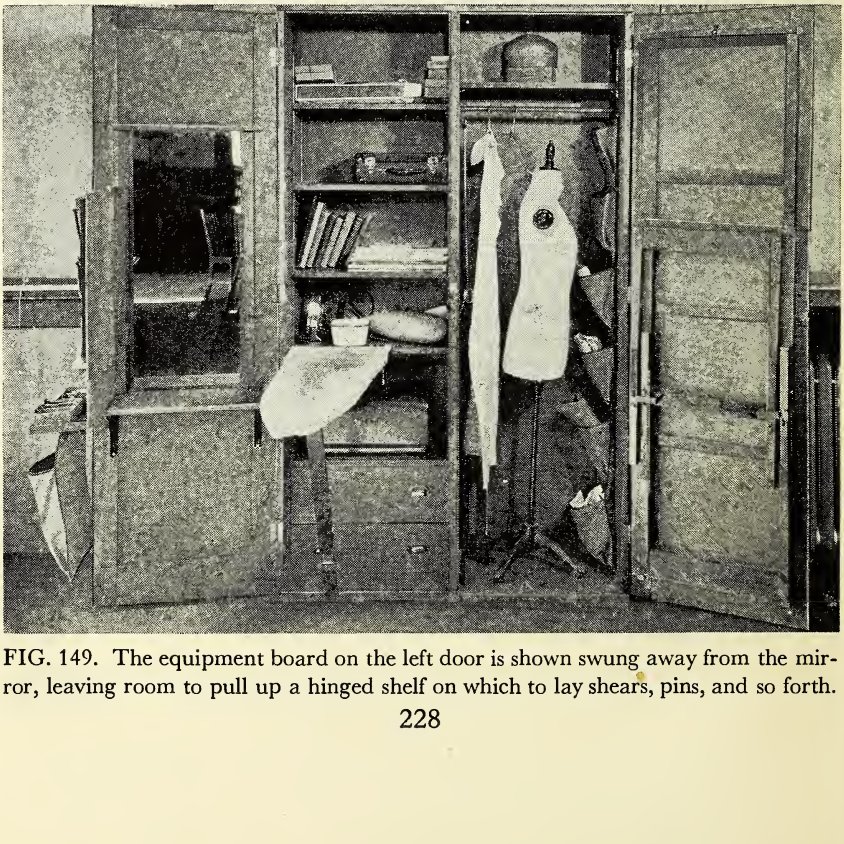


FIG. 149. The equipment board on the left door is shown swung away from the mirror, leaving room to pull up a hinged shelf on which to lay shears, pins, and so forth.

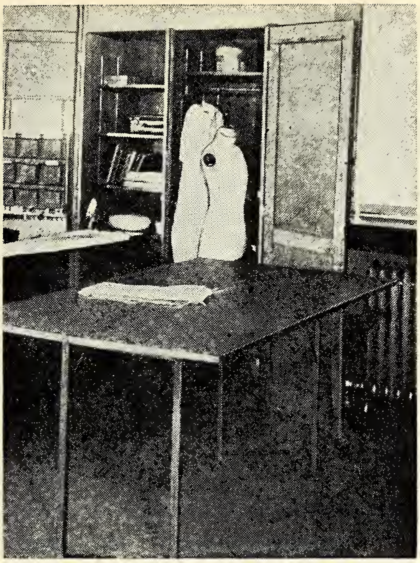
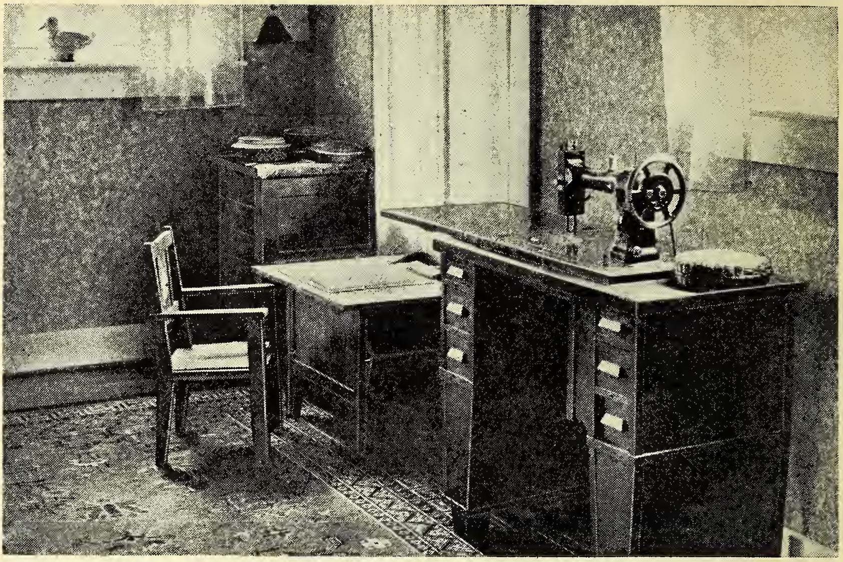
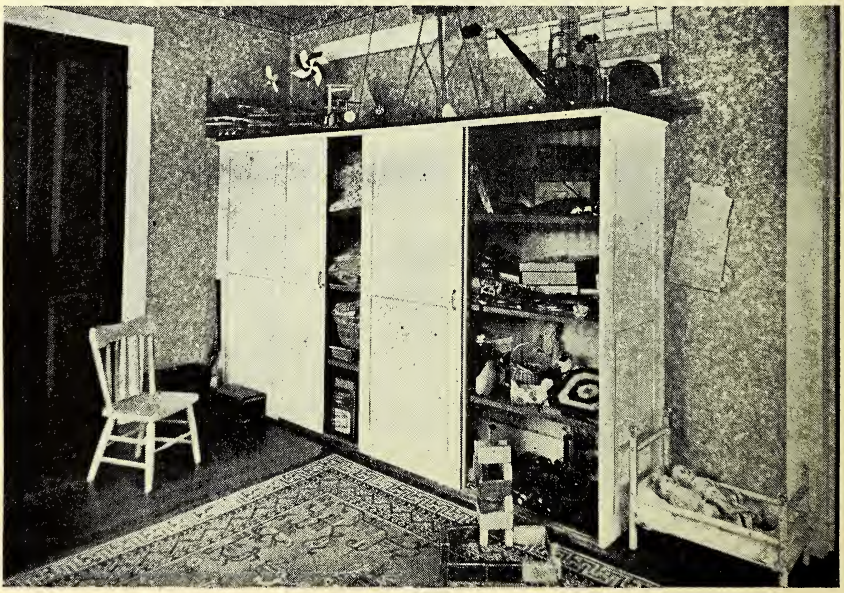


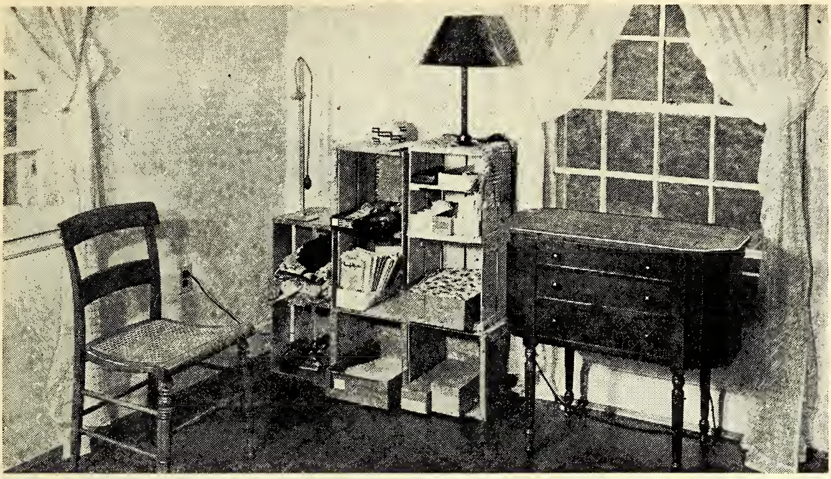
FIG. 150. The hinged cutting table is open for use. The top is hinged lengthwise, opens out to 4 by 6 feet, and is made of shellacked wallboard so that pins can be stuck into it. The legs are detached from the top, and are adjustable in height. Since the table is in two sections it is light to handle and simple to put back in place.

FIGS. 148–150. This cabinet was built by the college the next year for further experimentation. The homemaker's suggestions were incorporated, and three undergraduate students made aprons to test the arrangement of the small equipment. On the left door (Fig. 148) is an "equipment board," which can swing away from the mirror (Fig. 149). This board has pockets for tapes, patterns, and the like, a spool rack, a shelf for button boxes, and a movable tray for equipment used at the machine or at the cutting table, such as shears, pins, and tape measure. A scrap bag hangs from this shelf. Fig. 148 shows the ironing board folded up into place. Adjustable shelves hold portable sewing equipment, fashion magazines, pressing pads, and iron, and drawers contain pieces of cloth. The right section has a shelf at the top, a rod for unfinished garments, space for the dress form, and pockets for various pieces of sewing. On the right door is a collapsible cutting table. It slides under a cleat at the top and rests on a shelf at the bottom, and the legs button into place. Fig. 149 shows the cabinet set up for use. The ironing board is in place, the equipment board is swung away from the mirror, and a hinged shelf beneath the mirror is raised to hold pins and shears used in fitting. The 3-foot mirror gives a full-length view, but should be longer if the room is small. In Fig. 150, the table is shown opened out to its full size.

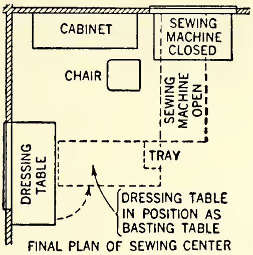


FIGS. 151 (above), 152 (below). One room in this house has been set aside as a combination sewing and play room. Next to the sewing machine is a low table at which the little girl can sit and paste and draw as her mother sews. This arrangement may account for the fact that this child, at the age of four, cut out her doll's dresses. The open shelves shown below are across the room from the sewing machine; in one section are the children's toys, in the other are the mother's sewing materials.

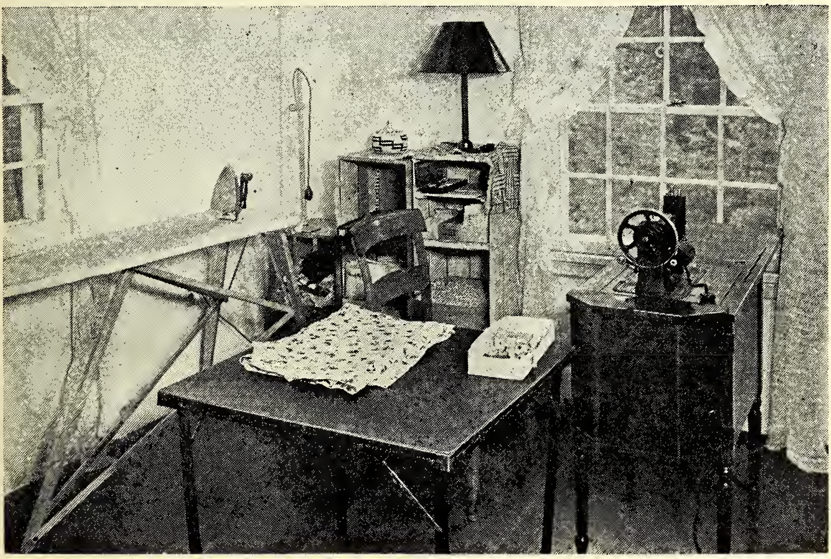


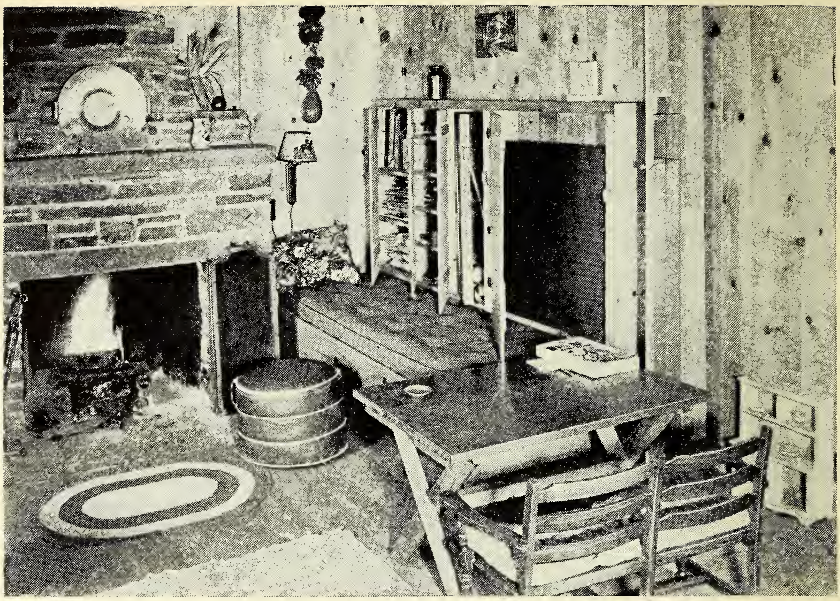


FIGS. 153 (above), 154 (right), 155 (below). This sewing center is being designed by a woman for the corner of her large bedroom. Orange crates are being used to test the best arrangement for a sewing cabinet to be built by her husband. Students helped with the plan shown in the diagram. A dressing table, since purchased, stands under the left window and swings out for a sewing table. With the machine turned at right angles, all of the sewing center is within reach of the chair and has excellent light. The ironing board and the extra table are stored in a clothes closet.

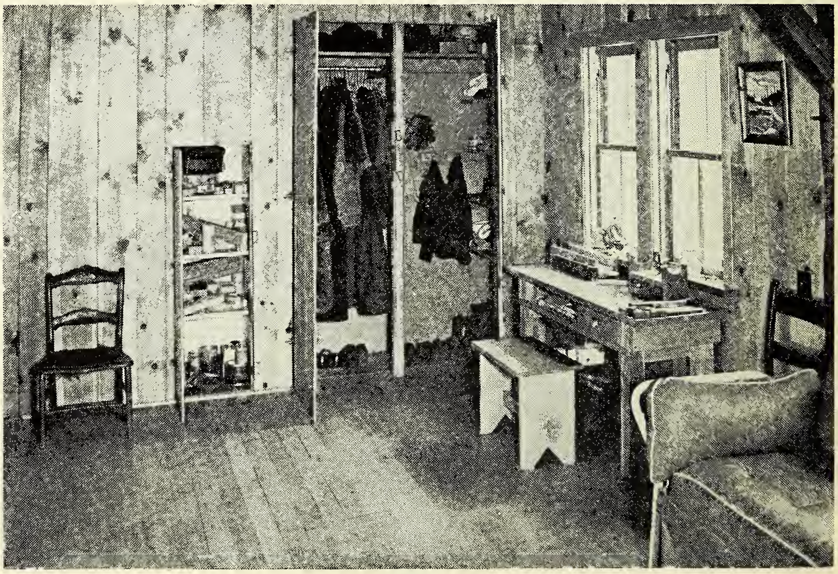

CABINET
SEWING MACHINE CLOSED
CHAIR
SEWING MACHINE OPEN
TRAY
DRESSING TABLE
DRESSING TABLE IN POSITION AS BASTING TABLE

FINAL PLAN OF SEWING CENTER SHOWING SEWING MACHINE AND DRESSING TABLE IN POSITION FOR USE



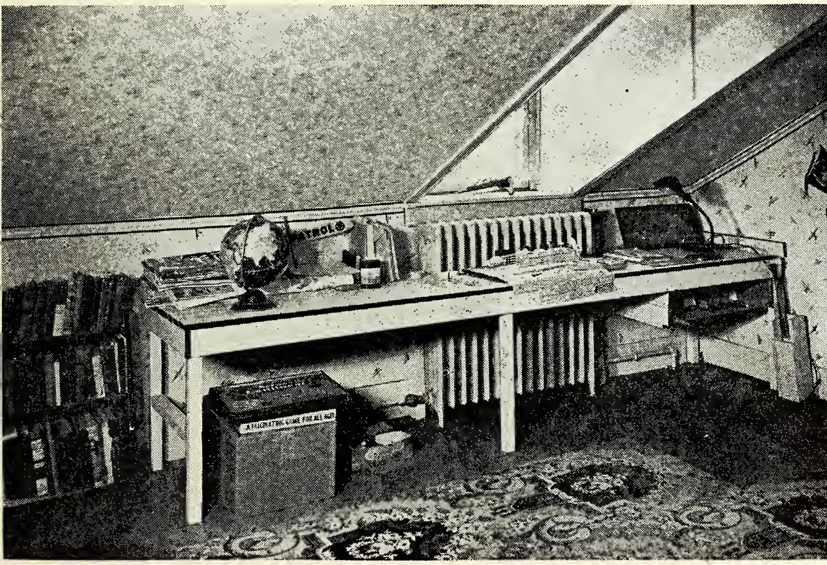


FIGS. 156 (above), 157 (below). A large back room of a farmhouse was converted into a playroom for small children, and is delightful enough to charm adults. Shallow cupboards over the daybed hold games, the croquet set, and a card table; behind them is a tall thin cupboard (the end door is open to the left of the doll cupboard) which stores the ping-pong table and the plywood back for the electric train. The trestle table is child size, as is the tool bench below in the other end of the room.



SYRACUSE
PRINCETON
PENN STATE
OHIO STATE
1935
COLUMBIA
COLGATE
DARTMOUTH
U OF PENN

FIGS. 158 (above), 159 (below). The two boys in this family are lords of their ow
room. They chose the carpet, built the workbench, arranged the furnishings. They
can tack things on the wall. This freedom entails the responsibility of keeping the
room clean — or keeping the door closed. The boys have an alarm clock wired t
turn the radio off and on automatically at any set time; it reminds the boys of bedtime
and wakens them in the morning. This is a boy's room, not an adult version of one


PATROL
A FASCINATING GAME FOR ALL AGES

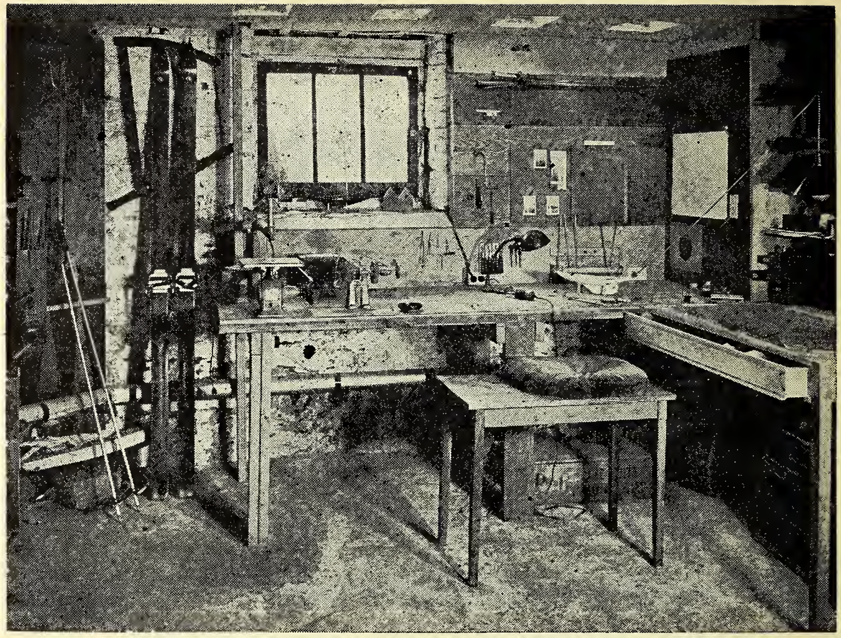


FIG. 160. Above and below are two workshops. To make the one above, two college boys, whose hobby was making boat models, ripped out unused coal bins. The artificial lighting is excellent: bulbs set into tin reflectors in the ceiling, and low lamps for close work. Good ventilation is provided by a fan and by a window rehinged to open at the top. The bench is built at the right height to stand at work, and is provided with a comfortably high seat and a foot rest. Note the broad drawer for storing blueprints. A heavy workbench and shelves for large tools are on the left.

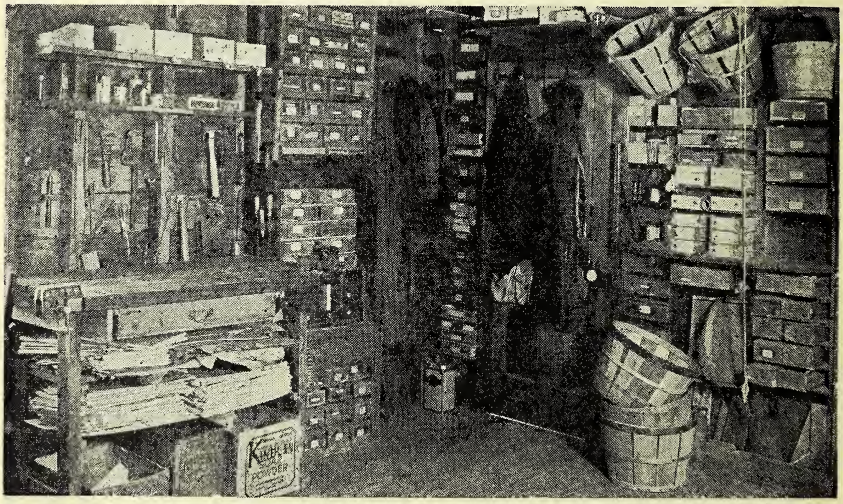


FIG. 161. A corner of a garage, shelved to hold everything in labeled cigar boxes.

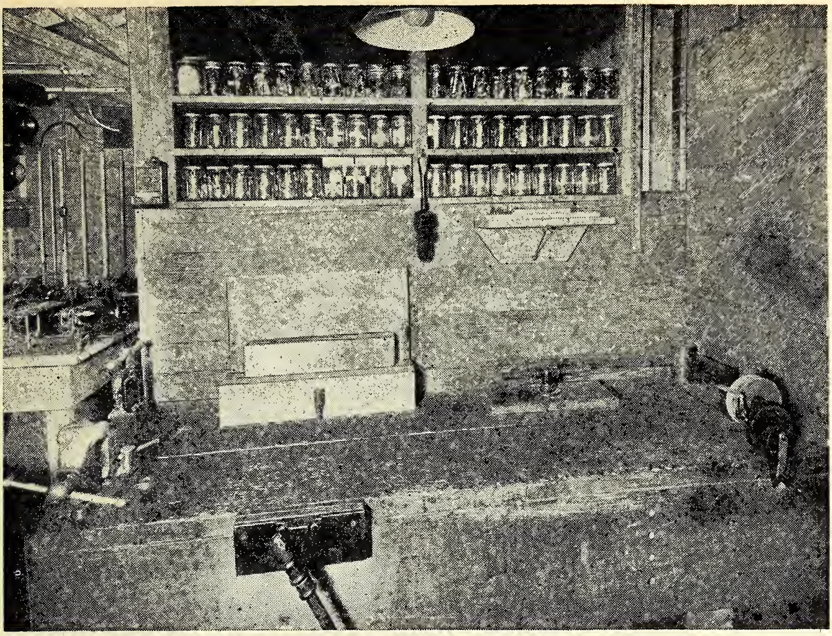


FIG. 162. Above and below is shown part of the basement workshop of a man to whom working with tools is a special pleasure. Glass mayonnaise jars are ideal containers to make screws, nails, and miscellaneous small gadgets both visible and handy. In the background at the left are pieces of wood- and metal-working equipment. Below is the tool chest he built. The doors close to protect the contents.

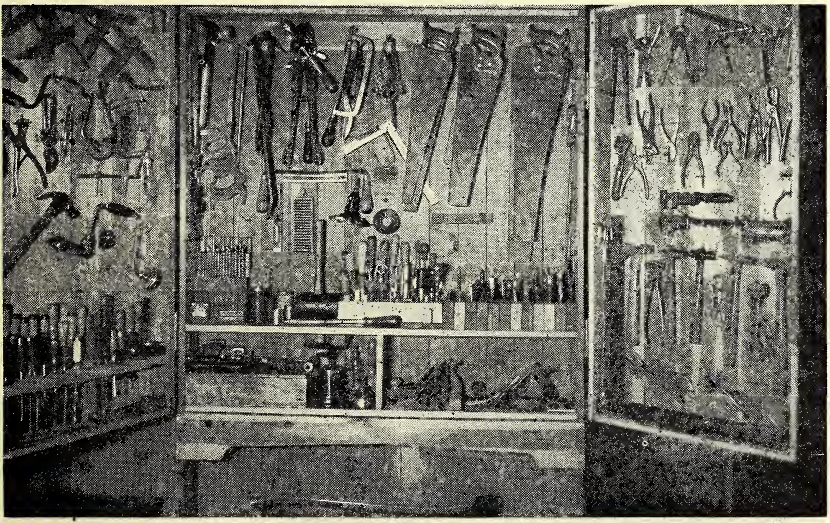


FIG. 163. The tool chest is similar to commercial cabinets but is individualized.

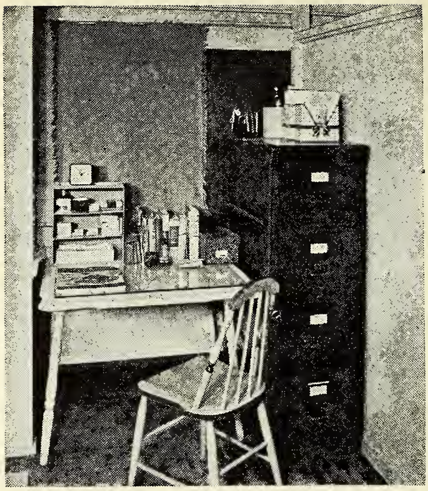
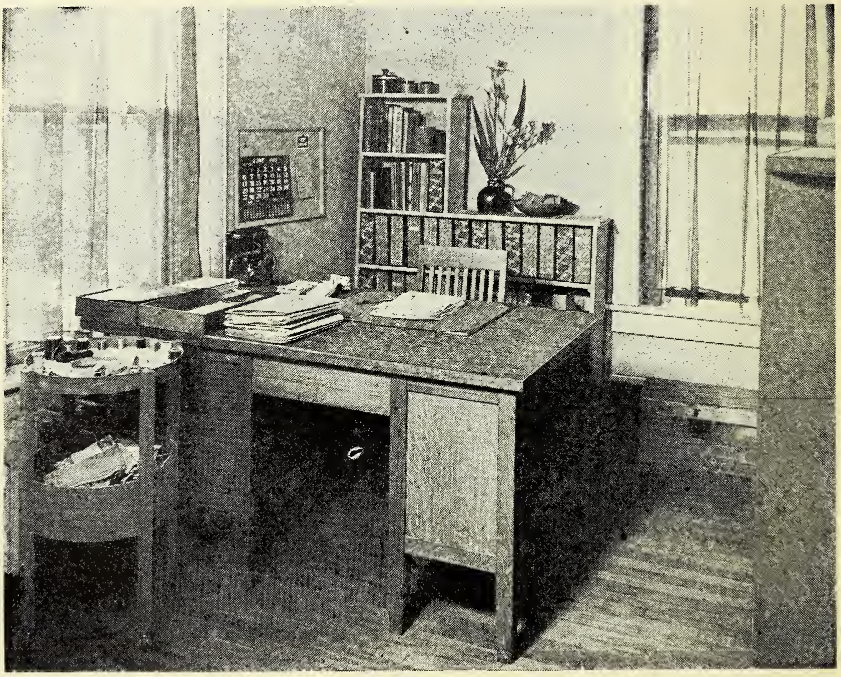


FIG. 164. A planning and filing center is important in both school and home. The one at the left is in a high school. The small shelves on the desk were made by students from a grocery box. Paper-napkin boxes make files for bulletins. The dull-orange hanging at the back is a piece of inexpensive material dyed in class; it warms an otherwise drab corner.

FIG. 165. Below is the view one gets on entering a Home Demonstration agent's office. Cardboard file-boxes have been made decorative with gay papers and put their undecorative contents convenient to the worker at the desk. The sewing rack at the left was made from a cheese box and is illustrative material in project work. It adds to the friendly warmth of the room. Two views of this office are at the right.



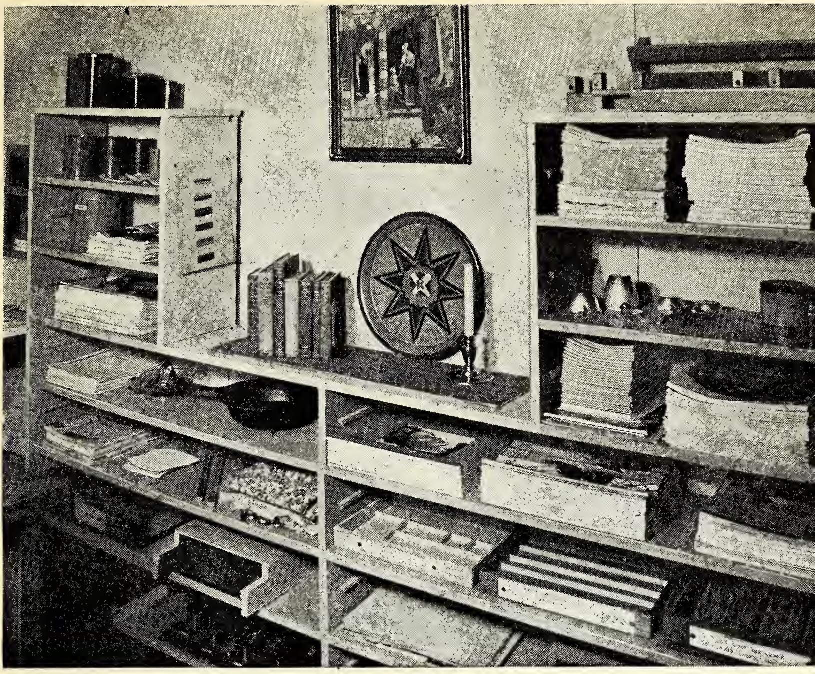


FIG. 166. The side of this cupboard appears at the right in Fig. 165. Here, teachin material — much of it utilitarian and most of it certainly not beautiful — has bee arranged to give an interesting and decorative effect. In this office unrelated objec which might have been merely cluttery have been used to give a feeling of informalit and to stimulate interest in the articles without interfering with office efficienc

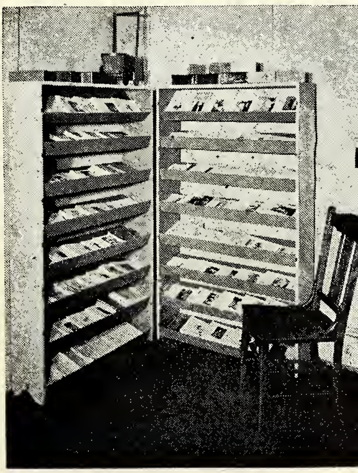


FIG. 167. This is the anteroom of the office shown at the bottom of the opposite page. This method of storing a large variety of publications has proved highly satisfactory. They are compact and visible, they are not too crowded, they are easily lifted out, and they occupy an otherwise useless corner. An adaptation of this rack, made in any size, could be used for the magazines in a home.

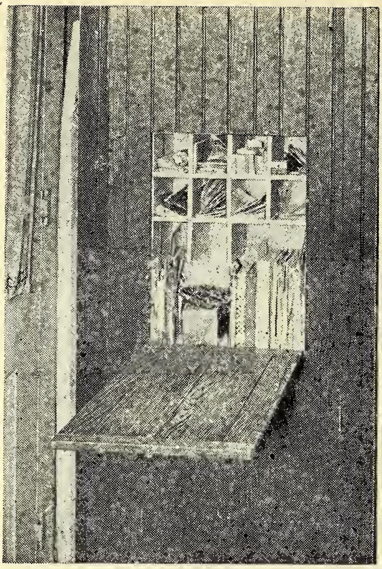
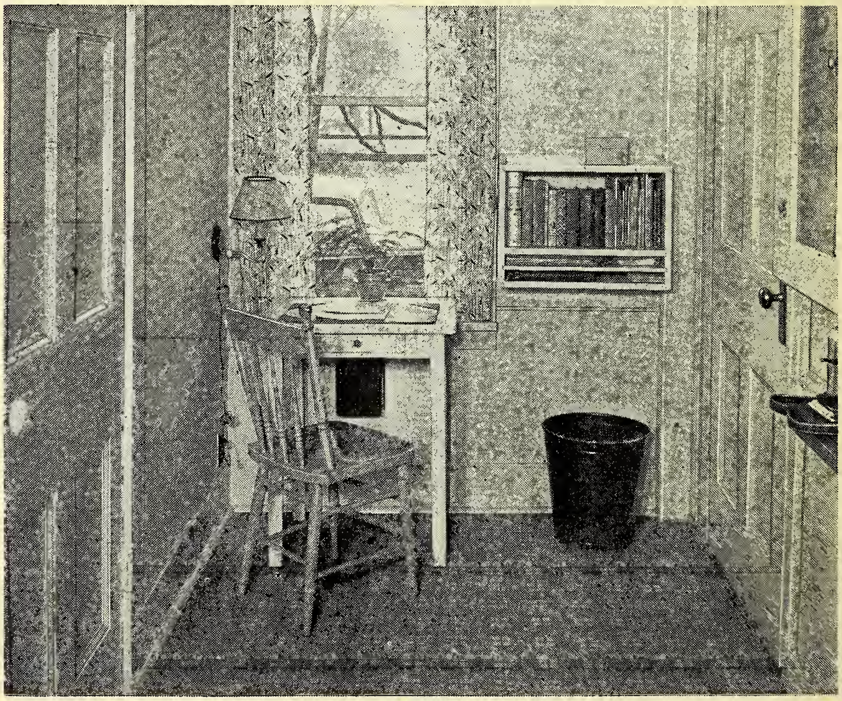


FIG. 168. Here is a truly ingenious solution to the problem of finding a place for a planning center where none would seem to exist. Cut into the door of a kitchen cupboard, the writing flap closes up to form the door again. The half partitions below the pigeonholes keep papers upright and in place, yet leave the wide space below adaptable.

FIG. 169. The planning center below occupies space otherwise wasted in the passage between dining room and kitchen. It is quiet and secluded, and gives this homemaker a place to plan her menus and her order list undistracted by any household confusion.



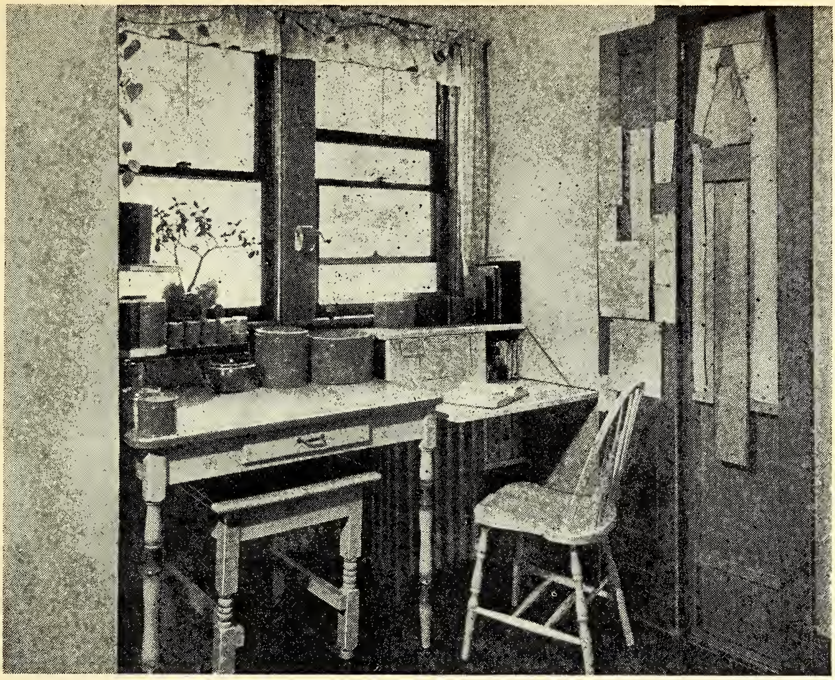


FIG. 170. The woman's husband built this planning center around an unused radiator in a small apartment kitchen. Beside the radiator are files. On the inside of the ironing board cupboard door are records and reminders. The leaf of the desk closes up, and conceals the contents. The radiator could still be used for heating.

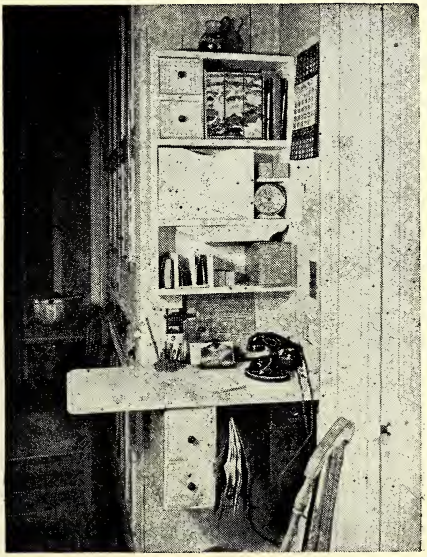


FIG. 171. In an unused — almost unusable — spot in the kitchen, this planning center was made on the leaf and drawers of a discarded sewing machine. It is complete with telephone, clock, calendar, receipt books, files, pencil rack and sharpener. The single picture on the three files makes each distinguishable to the homemaker, and all decorative.

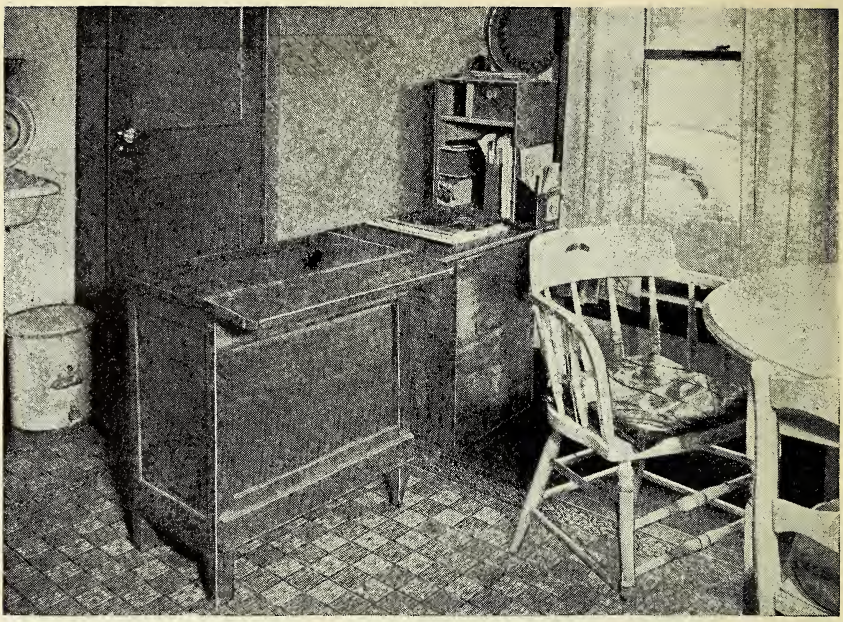


FIG. 172. An old cupboard and some boxes were used here for several days to determine whether or not it was an improvement to have the dining table protected by partitioning off a passage to the kitchen, at the same time making a planning center.

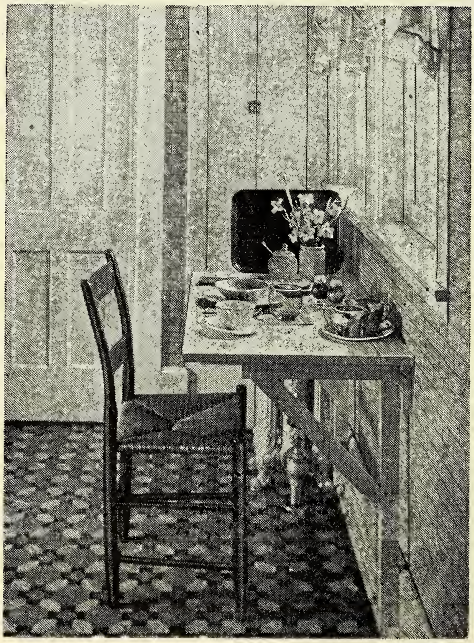
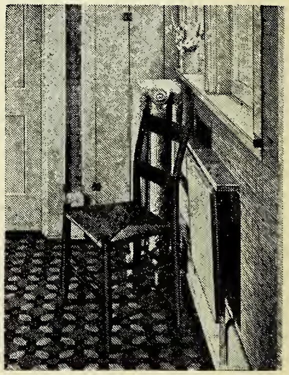


FIG. 173 (left), 174 (below). A small wall space provides dining space for one in a restful spot in the kitchen. The supports of the shelf are hinged to a cleat the thickness of the baseboard.



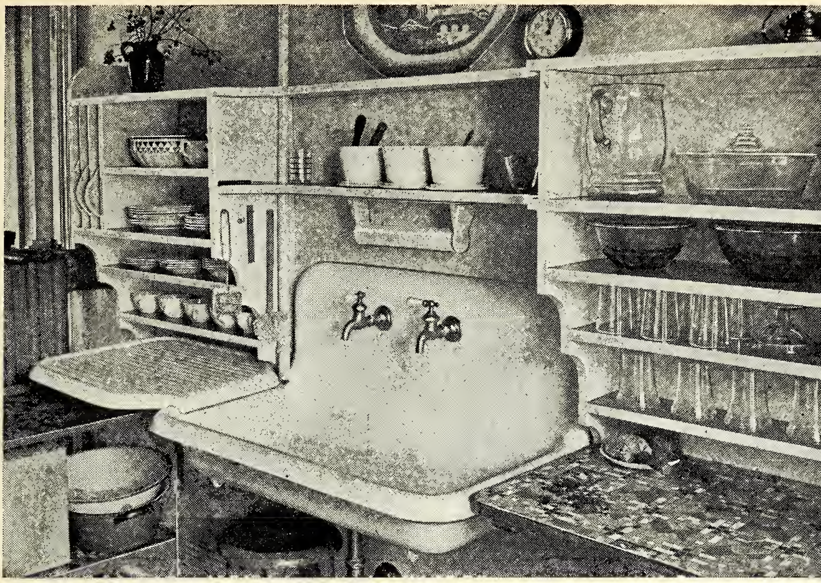
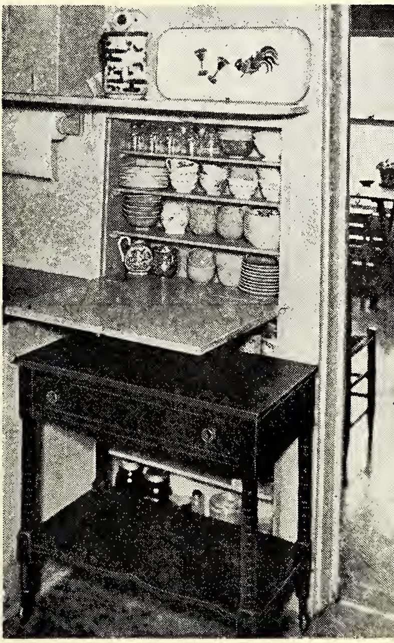
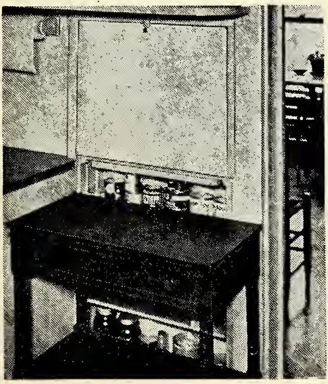


FIG. 175. Ten-year-old Jane used to hate to "do dishes" — just dry them and pok them out of sight. So these shelves were built and the tops painted the blue of th platter, and each dish helps complete a pattern. Having narrow shelves below save reaching over a broad shelf, and brings them low without interfering with the sink

FIGS. 176 (right), 177 (below). Here the wall itself provides storage space for the dishes used every day, and the door to the cupboard forms a convenient extension to the sink counter at the left of the service wagon.





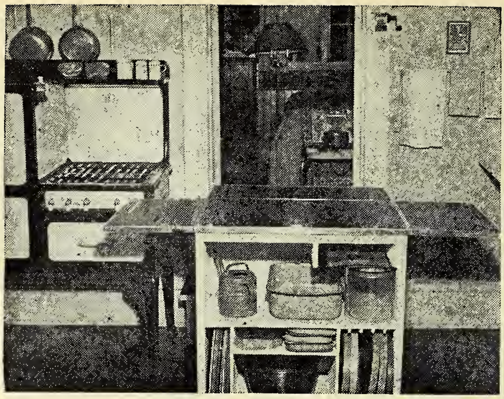


FIG. 178.

FIGS. 178–180. A graduate student in home management designed this combination table, counter, and storage cupboard on wheels to fit under a drainboard in a small apartment kitchen. In addition to its many adaptable uses, it illustrates how a small space can be made efficient by the use of pan files and shelves made to fit the equipment.

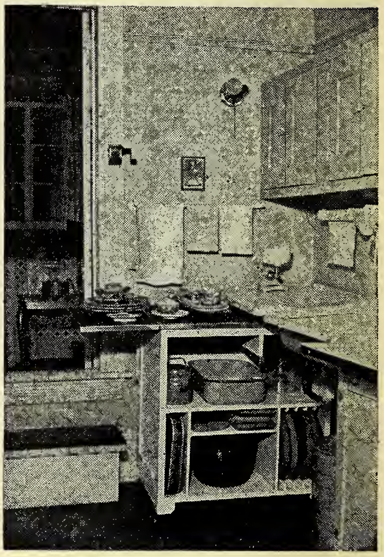
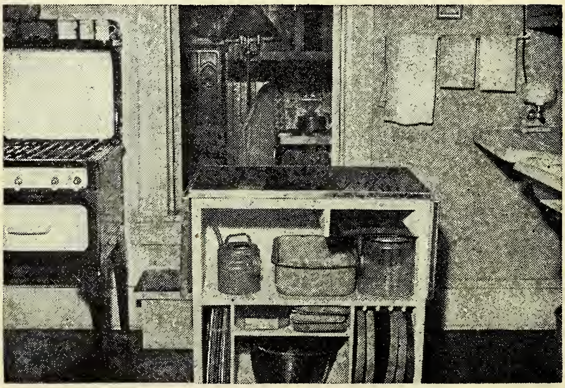


FIG. 179.

FIG. 180.



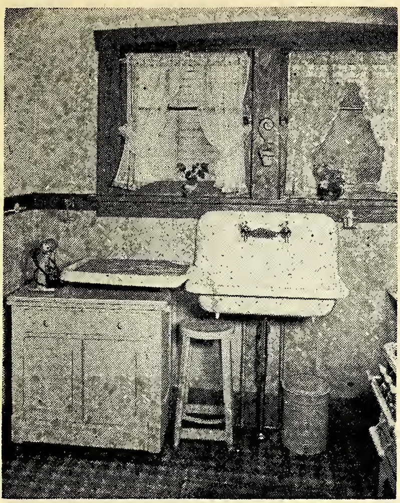


FIG. 181.

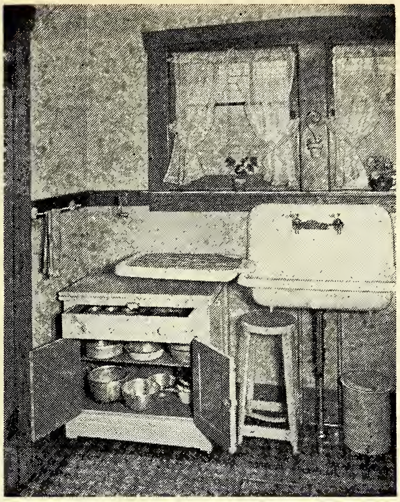


FIG. 182.

FIGS. 181–184. Lack of storage and table space in a small city kitchen was overcome by this ingenious adaptation of an old washstand. One leaf folds up onto the top, the other drops behind. Rubber-tired wheels and a handle at the end make it easy to move around. Dried dishes are put directly on it from the drainboard to be wheeled over to the cupboard. It also serves as a handy work surface near the stove.

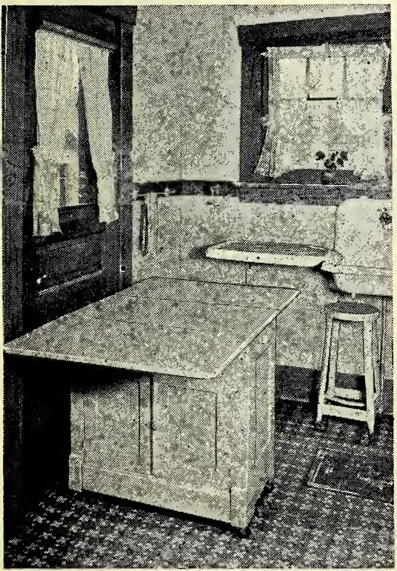


FIG. 183.

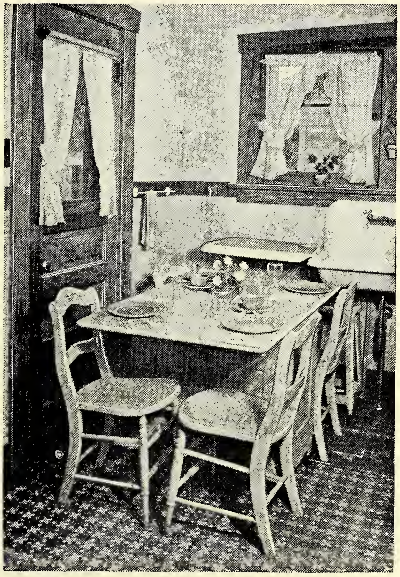
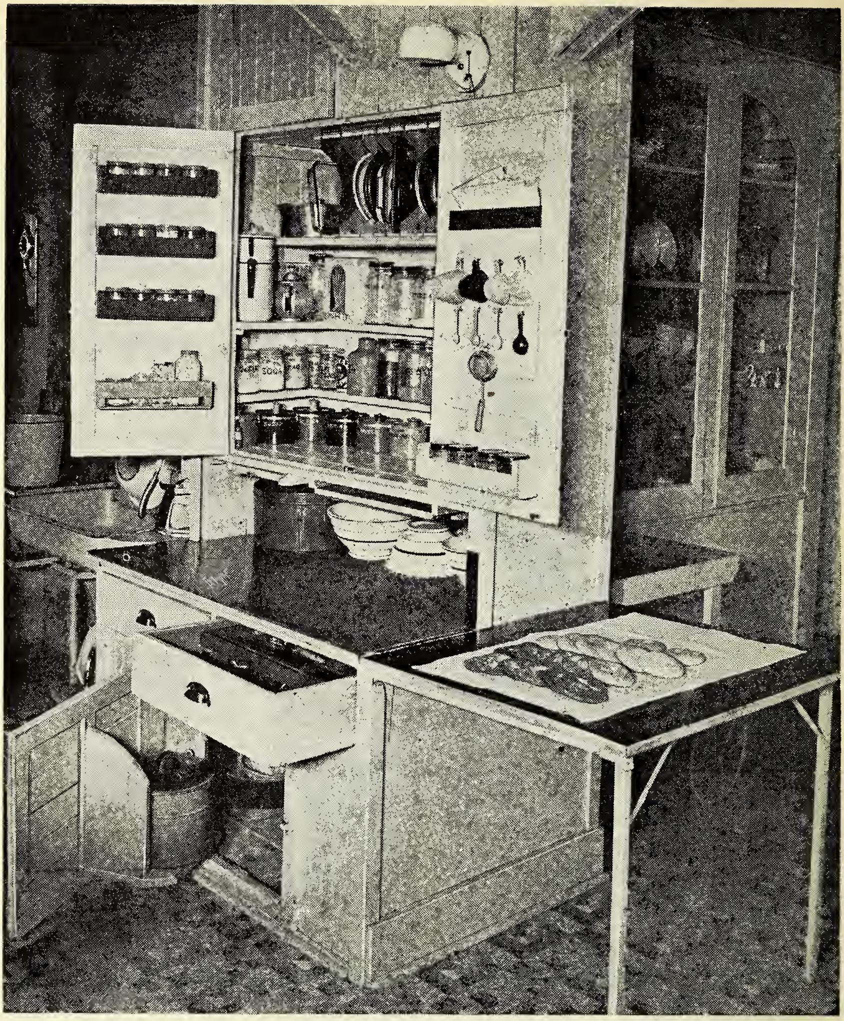


FIG. 184.



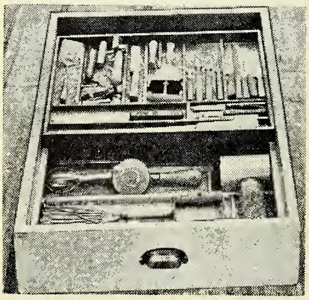
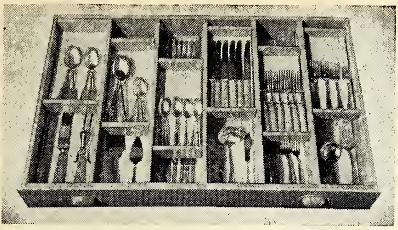


FIG. 186.

FIGS. 185 (above), 186. This old cupboard is now a mixing center. The shelves were cut back to hold only one row of containers, allowing space for the racks fastened to the cupboard door. Files on the top shelf make cooking pans separately visible and easy to reach. Containers have been made of coffee cans fitted with spools for handles. Under the upper cupboard are both the meat and the mixing boards. The drawer is fitted with a slip tray as shown in Fig. 186. The lower door supports the flour can. The legs of a cardtable have been fastened to a folding leaf which will drop to the side of the cupboard.



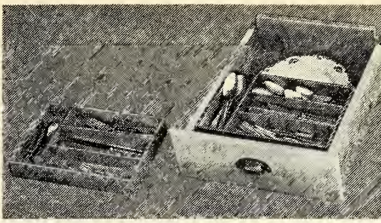


FIG. 187 (above). Five partitions divide this drawer, and cleats support half-length, sideless slip trays. FIG. 188 (above, right). Cleats above the Thanksgiving platter support two slip trays for silver. The projection on the back stops the drawer from sliding out. FIG. 189 (right). For her best silver, this woman measured slots to fit each piece, drew the pattern on wood, and paid 50 cents to have it made. Lining and cover are treated to prevent tarnish; a piece of camphor will do this, but flavors the silver upon contact.

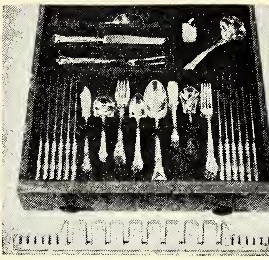
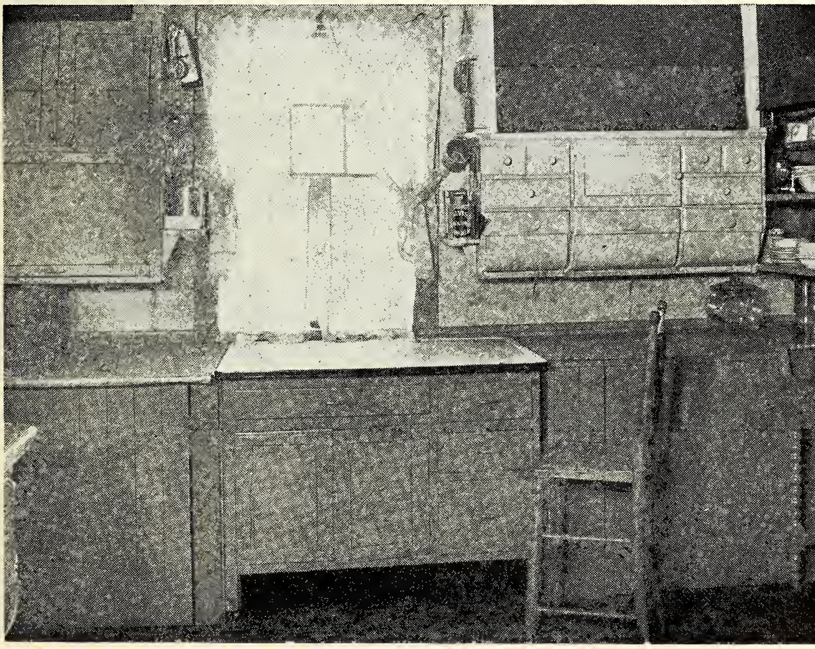


FIG. 190. A woman who enjoys nothing better than to have a hammer in her han did all the remodeling in this kitchen. With the help of another woman she tore apa two kitchen cabinets. She bracketed the two tops to the wall at the height most convenient for her, and placed the bottom of one by the window where the light wa good. On the ends of the cupboards, constantly used utensils are within reach



FIGS. 191 (below)–193. Below is one end of the dining room and on the opposite page the remodeled kitchen of a woman who makes cooking a hobby. She has traveled much and, as the bookcase shows, collected cookbooks from all over Europe. The panel behind the salt and pepper slides to the side to open onto the sink counter as shown in Fig. 192. Desserts or salads set out on the kitchen counter can be reached from the dining room, and dirty dishes can be put through and shut from view.

On the opposite page is the kitchen. Inset in the far counter (Fig. 192) is a marble slab which furnishes a cold surface for rolling piecrust and for making fondant for candies. The food mixer, protected by a dust cover, is kept permanently on the counter. The deep drawers shown open are metal-lined flour bins. Tip drawers in front of the sink contain dishwashing equipment. The counter, covered with blue mottled linoleum, extends over the automatic washing machine at the left; above it is the opening into the dining room shown in Fig. 191. There are no window curtains to conceal the view or distract the eye from it. The shelf below the window drops when not in use. At the left of the stove is a narrow cupboard for files of skillets and covers. Even the utilitarian articles around the stove are decorative, and the whole effect is pleasing.

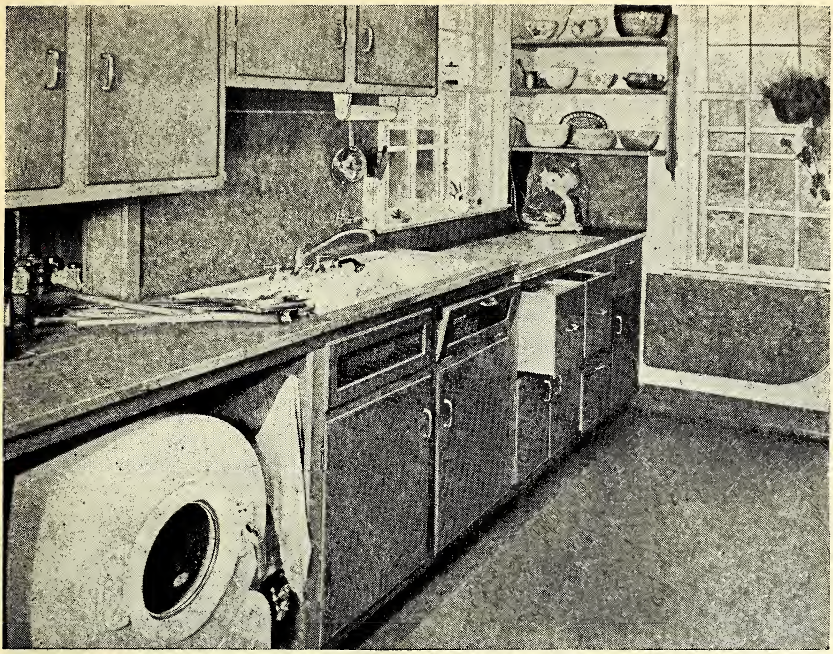
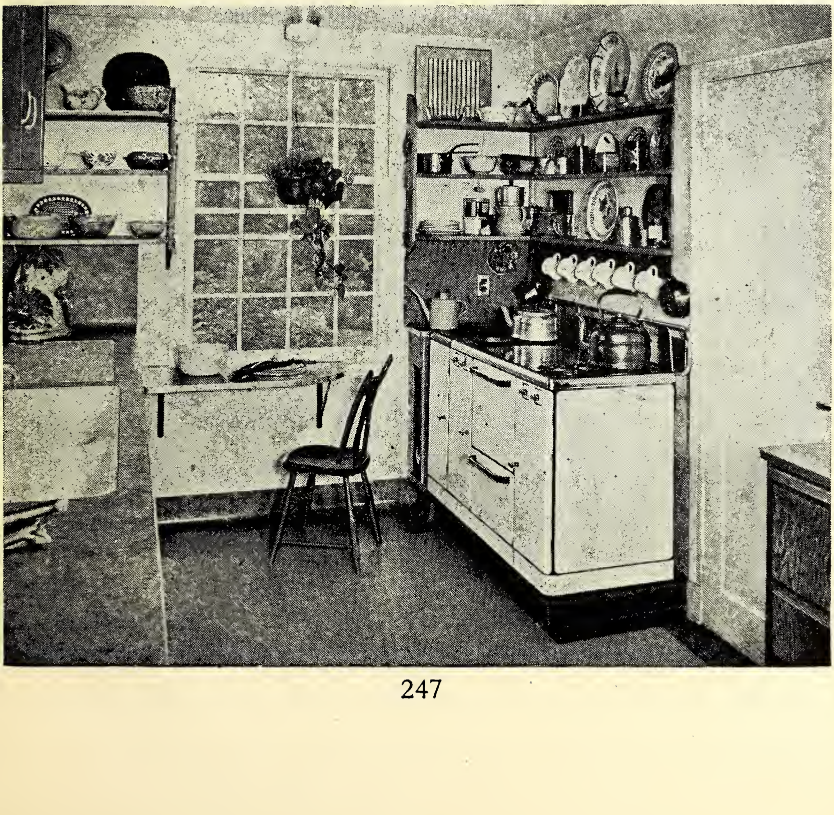
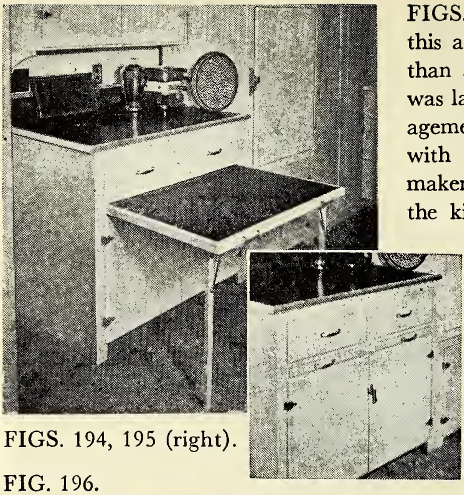


FIG. 192 (above), FIG. 193 below.



FIGS. 194–198. The compact kitchen on this and the opposite page is hardly more than a hallway. The architect's blueprint was laid out on the floor of the home management laboratory and the space fitted with cardboard equipment. The homemaker went through the motions of using the kitchen, and several improvements in the arrangement were made. Her husband is an engineer and did all the work on the kitchen, including the carpentry, and contrived all its many and unusual conveniences.



FIGS. 194, 195 (right).

FIGS. 194, 195. The legs of the breakfast table fold under and the table slides back into the cabinet.

FIG. 196.

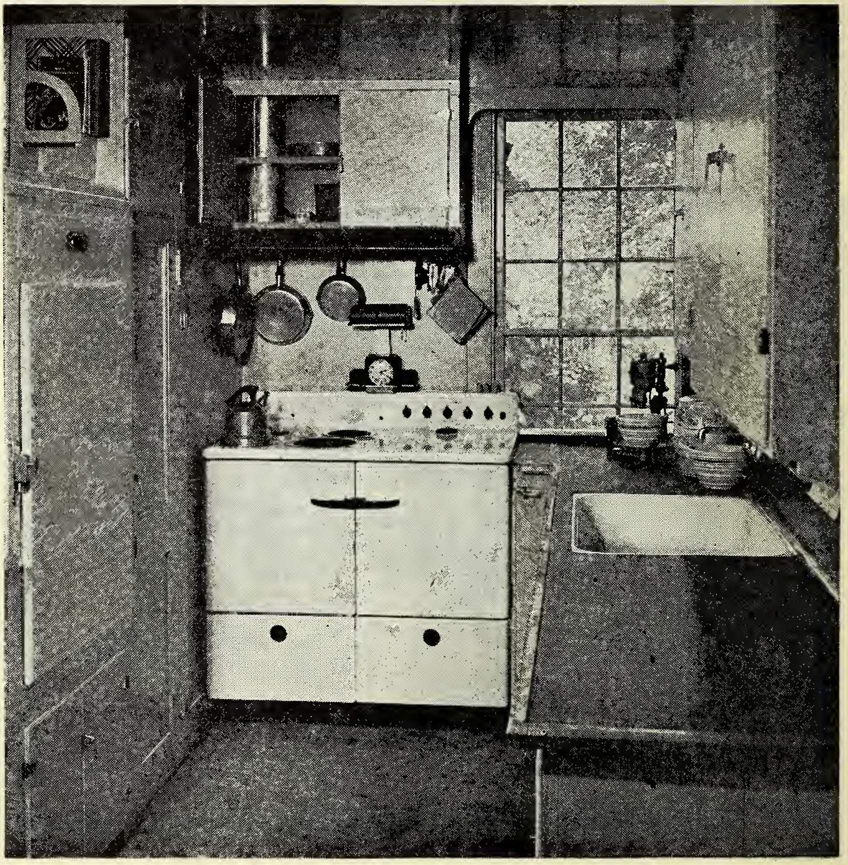
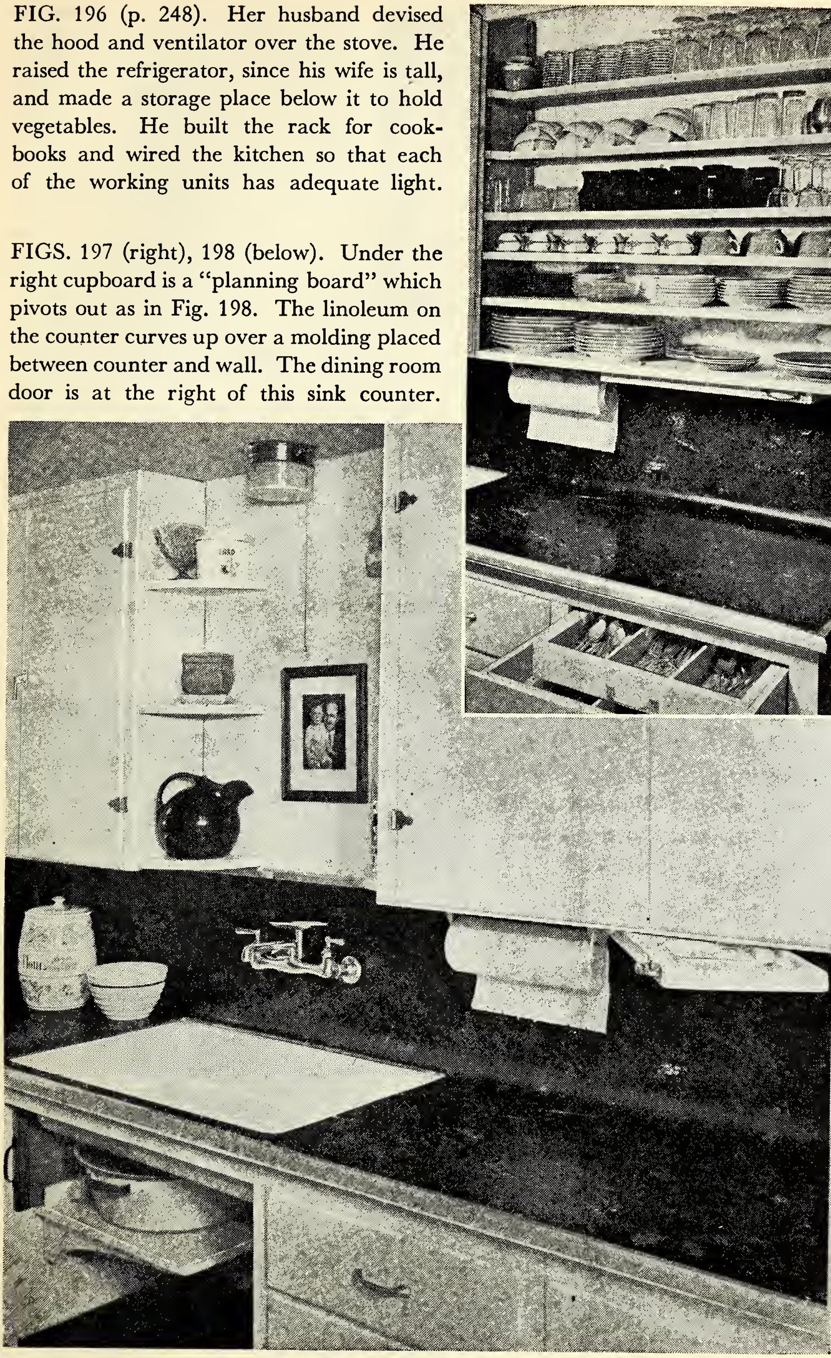


FIG. 196 (p. 248). Her husband devised the hood and ventilator over the stove. He raised the refrigerator, since his wife is tall, and made a storage place below it to hold vegetables. He built the rack for cookbooks and wired the kitchen so that each of the working units has adequate light.

FIGS. 197 (right), 198 (below). Under the right cupboard is a "planning board" which pivots out as in Fig. 198. The linoleum on the counter curves up over a molding placed between counter and wall. The dining room door is at the right of this sink counter.



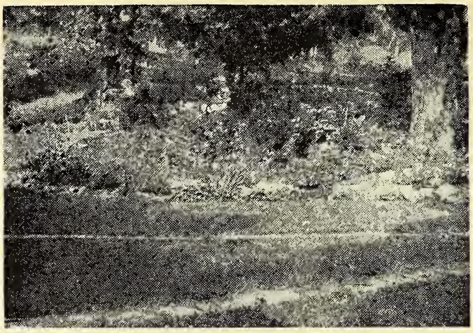
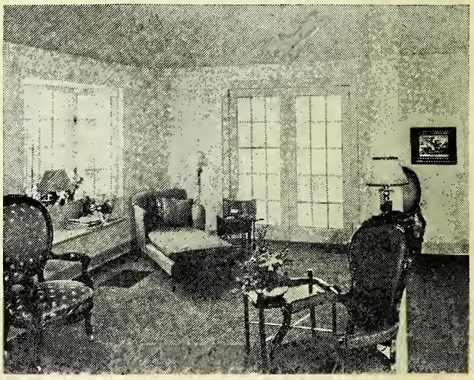


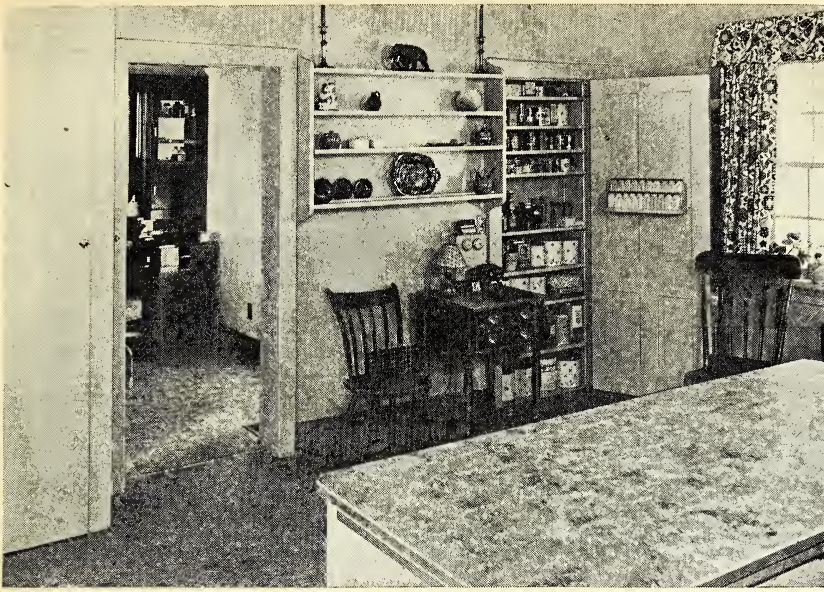
FIG. 199.

FIGS. 199–206. A business woman whose children were grown wanted to live in the country all year round and have at last enough flowers. She found within six miles of her work a small old house set in an amphitheater of woods fringing a sunny hillside. There were twenty-five acres in all, with pine woods on the right and open woods on the left, separated by a cleared hillside wet enough to feed natural pools. Her reconstruction of the place took seven years. She had a limited income, coming in as she earned it. At first she did only necessary things to the house: she sold the front porch and the back privy, put in electricity, running water for kitchen and bathroom, and painted. She bought good permanent equipment, such as an electric stove and an oil furnace. She first concentrated her money and effort on the outdoors, doing much of the work herself, even to bringing in the worn gray stones that make the rock garden and the paths that climb the hillside. Three large pools with natural bottoms drain the hillside.

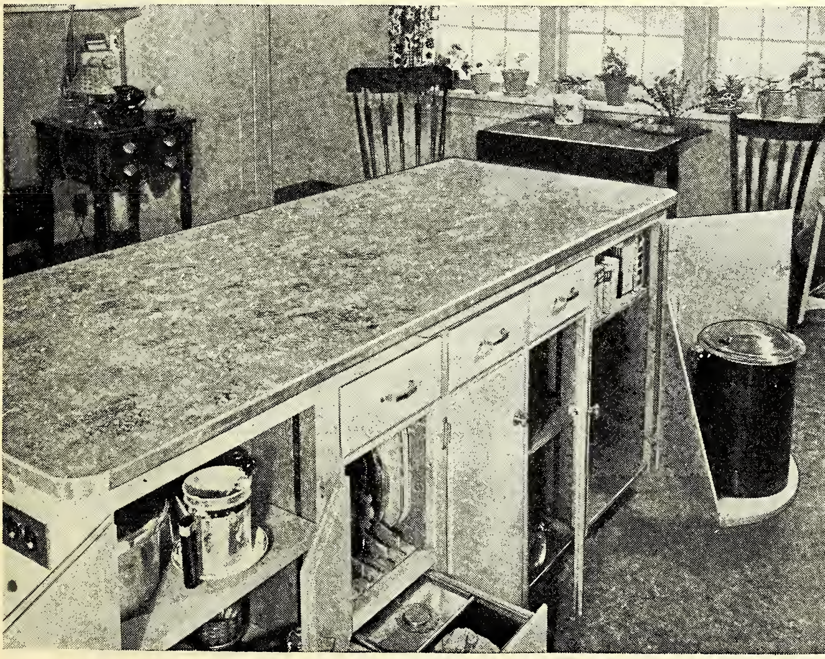
After five years of outdoor reconstruction, the ground floor of the house was made over as shown on this and the following three pages. Four rooms were converted into the large living room as shown in Fig. 200, and a large, multiple-purpose kitchen. Notice how inconspicuous is the partition upright which had to be left to support the floor above. The French doors open onto a flagged terrace leading to gardens and hill, a view seen also from the kitchen windows in Figs. 201 and 202. At the right of the picture in Fig. 200 a door leads through a dressing room to the kitchen. Several departments of the college helped her in planning and decorating, but the plans carried out her wishes; the large fixed counter was her own idea. Local carpenters and plumbers did the work. A graduate student in home management and her instructor in agricultural engineering drew up the plans for the plumbing. A home management class set up the kitchen in the laboratory. A house planning class worked on the total remodeling project, helping plan windows and doors, cupboards and closets. A house furnishing class brought out samples of materials for curtains, upholstery, living room rug, and linoleum; they mixed paint; they pulled the whole thing together. The three windows in Figs. 201 and 202 overlook the terrace and hills; on the other side of the kitchen a similar group (Figs. 205, 206) overlooks the rock garden. The "back" kitchen door (Fig. 205) opens onto a flagged porch which faces pools, hill, and rock garden.

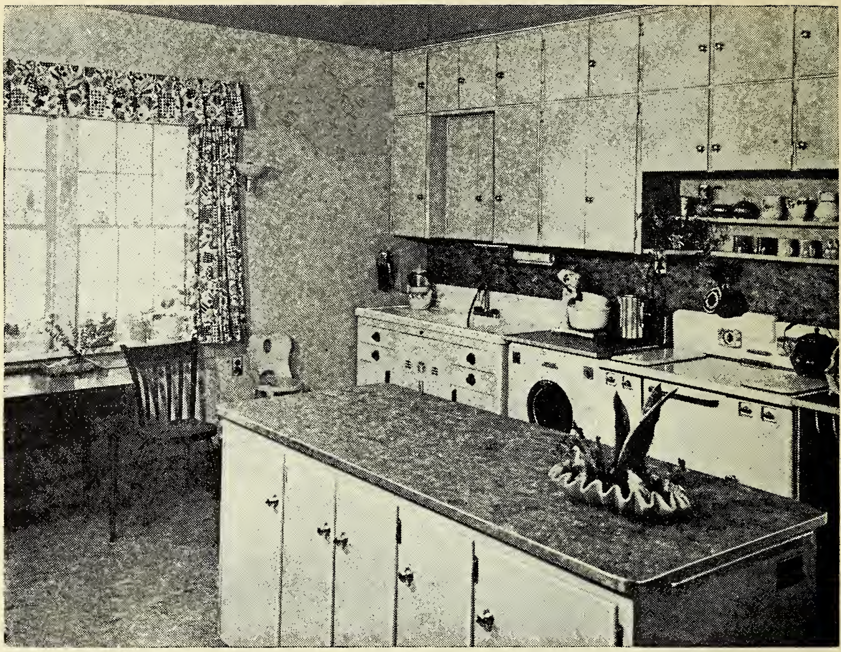
FIG. 200.



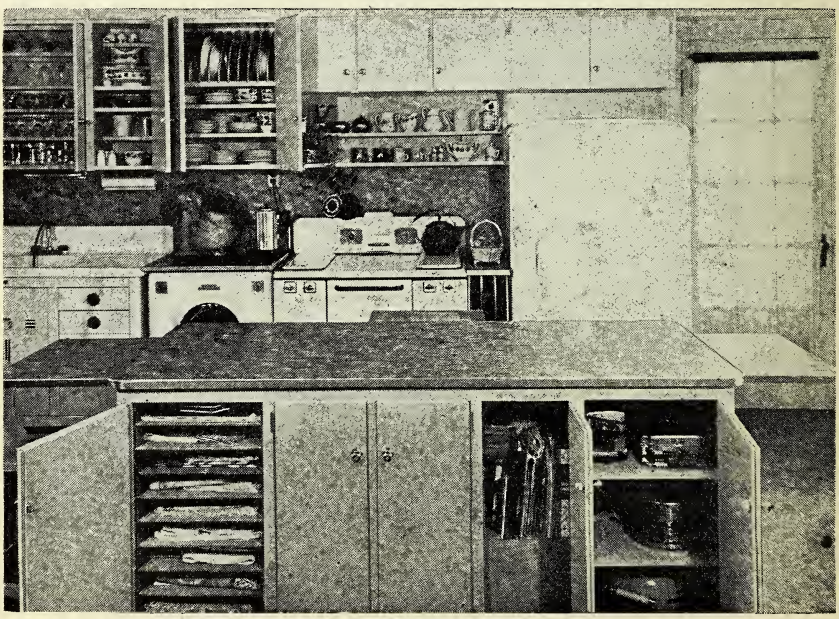


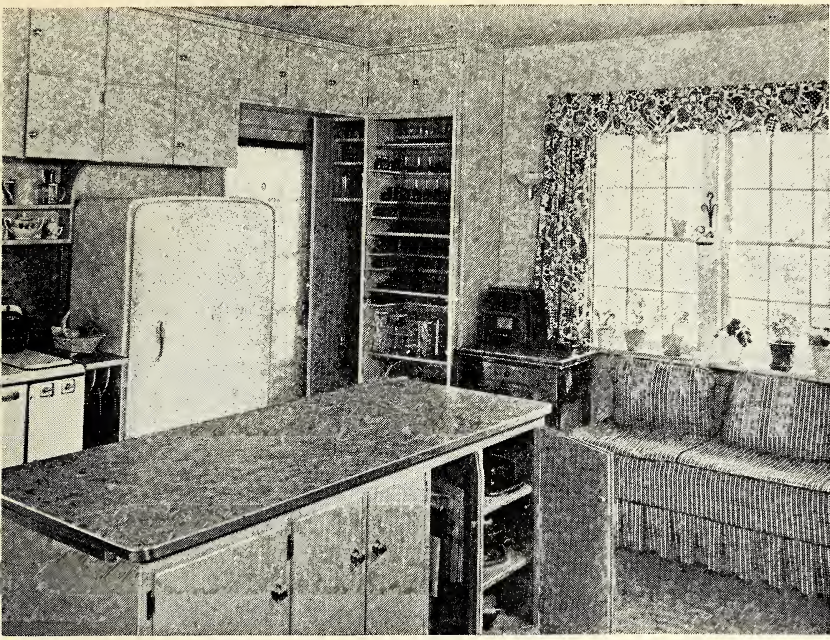
FIGS. 201 (above), 202 (below). The door leads through a dressing room (wit toilet opening off at the left) into the living room. The kitchen is 18 by 22 feet. Th closet was originally a doorway. Other views are shown on the following two pages



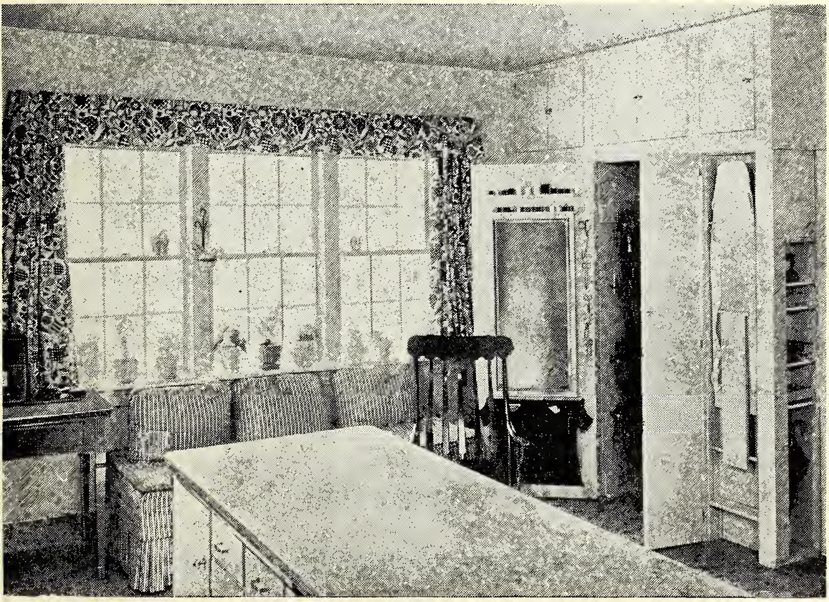


FIGS. 203 (above), 204 (below). Note electric outlets and pull-out counters in the ends of the fixed counter, and sliding horizontal files for table linen. This kitchen part of the room is like a separate room, with equipment only a step from the counter.





FIGS. 205 (above), 206 (below). By the door to a flagged porch is a cleaning closet, and one for glass beside the sewing machine; the closet door (Fig. 206) takes sewing equipment. This closet holds garden clothes and has two shallow cupboards cut from it.



QUESTIONS AND TOPICS FOR DISCUSSION AND INVESTIGATION

1. Make a list of the ideas suggested by the photographs in this chapter that you could adapt to advantage in your work at college and at home. You might find it an interesting hobby to take pictures and to start a collection of small photographs of clever conveniences that you notice in the homes of your friends and of ingenious ideas of your own that you have worked out successfully. Of what value might such a collection be?
2. To how many different uses could you put your own cellar? What would this involve in money, time, materials on hand, work, ability to handle tools, etc.? Would it be worth it to you? Explain.
3. Consider the need of more space for storage in your home. Look for wasted space that might be converted into useful storage. How could this be done?
4. Where do you keep your recipes at home? Your business records? Your pens, ink, pencils, erasers, pencil sharpeners, blank paper, and the like? Discuss the value of a planning center. How many of the above articles would you want in one place?
5. How do you file your college notes and other papers? Look up different filing systems. Look in stores, mail-order catalogs, and business offices for different kinds of filing equipment. If you cannot buy files, how can you make them?
6. Point out the same idea adapted to totally different situations in the illustrations in this chapter.
7. Give examples of cases you know in which the difference between dismal and cheery work centers has spelled the difference between drudgery and fun.
8. Take a look at all of your drawers — desk, bureau, kitchen, and others. What can you do to them to save motions and annoyance? Study ways of doing this.
9. Give examples from homes you know in which the uses of rooms have changed from time to time to meet the changing needs of a growing family.
10. List as many advantages as possible of trying out a new idea that will involve considerable change, before actually making the change. How might such a procedure affect one's attitude towards the change? How might it affect efficient use of time, materials, money, labor?

CHAPTER 16

FOR TEACHERS OF HOME MANAGEMENT

The suggestions that follow are intended primarily for teachers of home management in colleges, though many of the ideas can be adapted to high school teaching. The high school teacher has a difficult problem. She is but a small part of a huge state-wide educational system. Her class periods are short, her pupil enrollment heavy, and she must teach many classes in a day. However, high school teachers who have experimented with different phases or adaptations of this method of teaching home management have found it valuable.

THE USEFULNESS OF HOMES IN TEACHING

The recent advance in the method of teaching home economics is broad and encouraging. Already, such subjects as foods and nutrition, economics of the household, household art, and family relations are taught by bringing the student into contact with actual home situations. It is even more important that the teaching of home management, which is a wide and general field, should be taught in homes if it is to have reality for teachers and students. Teaching home making, our most universal occupation, has been discouraging because it loses practicality when divorced from the home and taught in the school. In itself, homemaking has immense reality to students, but it belongs in the home. It is associated only with home. It has no life outside it. To put it into the laboratory is to create instantly an impatience in the mind of the student, who knows from living in a home that learning to plan and cook nutritious meals is not learning to plan and cook three meals every day; that learning to put a meal on the table is not learning how to put a meal on the table and get the baby fed at the same time; that learning how to budget money to cover eating and sleeping and dressing is not going to help much when just eating takes all the money. It is of great value to learn about cooking and budgeting, nutrition and clothing, housing, and the psychology of family relationships, but to learn how to cope with all these things operating together, one should study homes. It is the best way to appreciate how intricate home problems can be.

This is not easy to manage at a school, either a high school or a college, and therefore it has too often seemed necessary to teach only what could be taught at school: the principles and theory of homemaking, with such practice as the school itself could provide. The subject matter, thus limited to the school setup, is artificial; and to make it fit at all comfortably into its boundaries, rules and standards of what is good or bad, wrong or right, are too often set up. These rules would apply if in real life the subject would stay within those artificial boundaries, but it does not do so. In school theory, vitamins may become synonymous with vitality; in life, happiness might do more than vitamins to keep a person well. In school, a budget seems almost to create the bonds in the bank to implement it; in life, emergencies may consume not a fixed proportion of it but all of it. Efficiency, that glittering answer to everything, may in the home actually destroy the smooth harmony it aims to create. To be sure, the subject of home management is easier to teach, the papers easier to grade, the lessons easier to get if the subject has boundaries with a right and wrong way to do things; but if there is a more effective way to teach and to learn, it should not be discarded because it is more difficult.

The fact is that studies of foods and budgeting and efficiency in work are only tools; the thing the tools are meant to build — the home — is something else again. To teach students how best to use these tools, it is necessary to show them how these tools work under actual conditions, the more varied the better. It may be disconcerting, for life has a way of not adhering to rules and standards; but it is the best teacher. The students will find that in real life homes often function smoothly that fly in the face of standards and theories; but it should surely be an advance to discover that, no matter what rules are broken or what theories upset or what well-established principles are side-stepped, the home that is managing most successfully is the one in which important family values are being attained, no matter what the method. It is for this reason that homes are the best textbooks of home management, a reservoir of source material invaluable and inexhaustible.

Those who use homes as textbooks in teaching home management have found that it is important for the student to have a certain body of knowledge outside as well as within the field of home economics before going into homes. If students know something about the extension service in their states and local communities, they will have at the beginning a better understanding of the purpose and value of holding class meetings in homes. If they know something of the factors contributing to fatigue, they will be better able to recognize causes of fatigue in homes. If they know something of the use of tools, they will more genuinely appreciate what members of these families have done to make the home easier and pleasanter to live in. For this reason, suggestions for reading and discussion that bear on such related subjects have been added at the end of the early chapters in this book.

In any course in home management both teacher and students need to guard against concentrating overmuch on the material resources they work with. They should not make them ends in themselves but rather the means to more important achievements. For example, the student who becomes so intrigued with a way of rearranging a cupboard that she goes home and rearranges a cupboard for her mother who does not want it rearranged has missed the point of the course. Things often seem more important because they are tangible; but the sources of many problems of the home manager are far from tangible and cannot be solved by the use of material resources alone. The solution of some of the most serious home management problems may lie almost entirely in the field of human relationships. In such a case the student or teacher will want to apply to persons qualified in that field to add their experience to the solution of the problem.

THE APPROACH TO HOMES AND COMMUNITY CENTERS

"But how do you get women to let you bring classes to their homes?" This is usually the first question asked by the instructor who has not used this method of teaching home management and who wishes to do so. The method does present obstacles, and these obstacles differ in different communities and teaching situations. Methods that might work successfully in one place might not work in another. Each instructor needs to work out her own solution in the light of her own conditions. Certain lines of approach can, however, be suggested.

In the first place, the teacher needs to take advantage of every opportunity to become acquainted with families in her community. This means following up initial contacts. She needs to be alert and on the lookout for evidences of successful management in the homes she visits. She may notice, for example, an especially clever labor-saving device in a home. By mentioning it and inquiring about it, she may discover a good example of how the members of this family, thinking and working together, have developed the device to correct some irritating situation in their home. In ninety-nine cases out of a hundred, the homemaker is more than glad to welcome the class to her home to see the device. But far more important, as the homemaker becomes better acquainted with the teacher and with the purposes of the home management course, she may be willing to tell the class the management story behind her home: how she and her husband managed from the time of their marriage; what plans they made and what obstacles they faced; how compromises were accepted; and how, perhaps in the light of new knowledge and experience, their purposes or values changed.

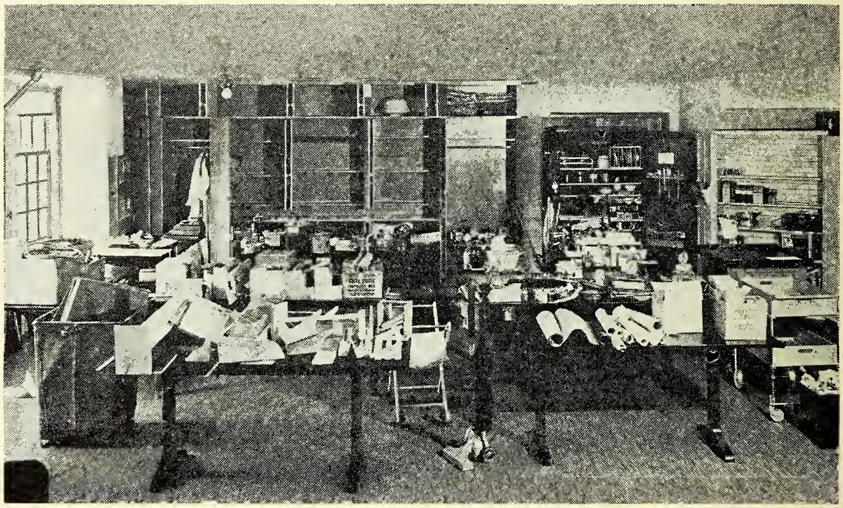
Most home management instructors have had neighbor homemakers come to them for help with some of their home management problems. In such a case, if the homemaker can give the time, she and the instructor and her students may agree to work together to solve some of these problems. The class may then visit the homemaker and study the problem against the background of the home. A useful method of work is to have the class divide into small groups, each with a chairman, and select some phase of the large problem on which to concentrate. An over-all committee composed of a representative from each group can keep every one informed as to what the others are doing. Sometimes groups within a class may be working in different homes but on the same problem; for example, on how to improve working heights. To avoid duplication of effort, these groups could form an intergroup committee to confer on this subject. The small groups may meet with the homemaker both at the college and in her home to experiment with different ways of overcoming her difficulties and even to do some of the work necessary to carry out the final plan. Numerous investigations will open up, since no two homes are alike. Written reports of these projects make excellent source material for future classes in management, and the homemaker and her family are usually glad to show to other groups the concrete results of the project and explain its benefits. In this way, the best kind of demonstration material is being built up in a community, humanized texts are being written, and excellent teachers of management are being discovered in homes.

When the fact becomes known that homemakers may work with college students in this way there is seldom lack of actual home management problems for class work. But if more home management problems or more examples of successful management in homes are needed than the instructor has access to in her community, she might contact the Home Demonstration Agent in the county in which she teaches, or the home management specialist of the state extension service. These persons will know many good home managers in their counties, and may pave the way for a class visit to homes. Welfare agencies, public health nurses, and settlement house directors may also know of families who would welcome the opportunity to work with students. Churches, granges, and other community organizations may ask for such assistance. Even a firehouse wanted a kitchen (Figs. 102, 103).

A class tour to several such homes is not only stimulating to students but gives in a single lesson a picture of the variety of ways in which families with differing resources manage to satisfy their needs and desires. It will also give to these families a well-earned recognition of their good management. Such a tour is a great leveler. Teachers, homemakers, and students forget that the role of teacher and pupil has set up barriers between them.

Another worthwhile experience for students is to accompany a home management extension specialist to a management conference in a home. Here the students will meet the homemaker informally, in her kitchen perhaps, where a group of her neighbors is gathered to discuss ways of overcoming some obstacle to good management of which the homemaker is aware. Through the questions asked and the personal experiences related, and through the use of practical illustrative material, other more serious obstacles of which the family is unaware may come to light — the first step in their solution. If Home Demonstration Agents and extension specialists understand the value of such cooperation, they are usually glad to offer this opportunity to students; and families seem to enjoy the contact with these younger persons.

The relationship between teacher and student may open up fields for class study. The instructor, realizing the value to herself of her students' ideas and suggestions, could invite the class to her own home to discuss some of her problems; and this objective, friendly, informal contact between teacher and students has its own values. A student who lives in town might want to ask the class to her home to help her family with some problems of management, or students who do part-time work in homes might inform their employers of such an opportunity and this might lead to the employer requesting help. Teachers of home management, either in college or high school, may discover that many of the principles of home management can be taught through the planning and carrying out of temporary or permanent laboratory arrangements (Figs. 207, 208). The ideas used



FIGS. 207 (above), 208 (on facing page). Order *vs.* confusion in a home management laboratory. This mass of material was arranged by a class in home management. Originally, the dark cupboard at the center right was the only storage space, and an earlier class did the best it could with this, putting the articles most used into the cupboard so that everything could be seen and reached without any unstacking or reaching over; the remaining articles lay around on tables or were stored in the basement until new cupboards could be planned and built. When these new cupboards were built a later class wrought the transformation from Fig. 207 to Fig. 208. Each article was questioned: "Will it ever be used, how often will it be used, where will it be used?" Discards were put in one pile, articles for the basement storeroom in another, and the remaining were sorted onto tables of like articles, as shown above. The class then divided into groups, and each group selected a tableful to arrange.

in such demonstrations, arrangements, and exhibits may come from the homes of the students themselves and carry new ideas back into the homes.

Teaching with homes for material calls for tact and discretion on the part of the instructor, but not more than all teaching does. Obviously, it is wiser to work only in those homes in which the homemaker really wants and asks for help. All of us tend to resent having help offered to us, especially if we do not feel the need of it. Nor is hypercriticism of a home really helpful to either student or homemaker. No homemaker claims that she manages perfectly in all respects, nor does any homemaker pretend that she does not manage poorly at times. Examples of poor management will be found side by side with good management. So much of value in home management can be

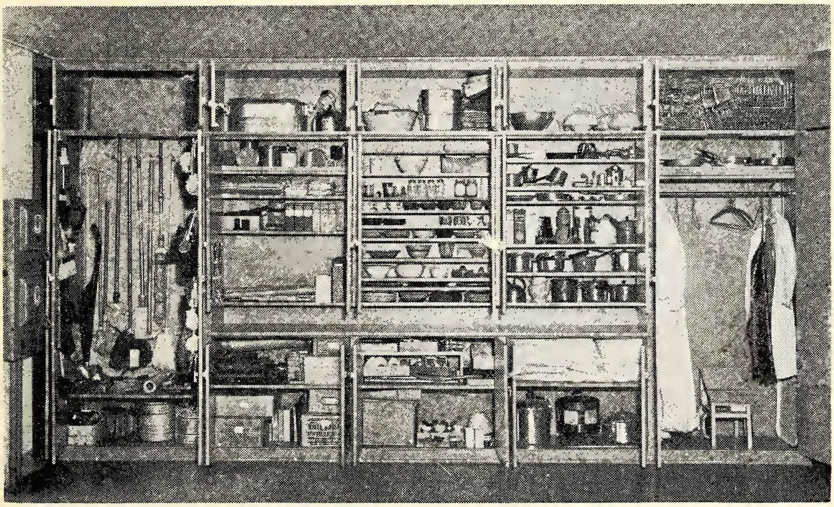


FIG. 208. To avoid confusion in changing articles and shelf positions, each group planned its storage space on paper with ruler and pencil. They cut paper shelf patterns of actual size and placed the articles on them, and allowed for the thickness of shelves and the heights of the articles. Since the shelves were many and adjustable, it was a simple matter to put the articles in the cupboards by referring to these plans. The more rarely used articles are on the top shelves. Below these, from left to right, the cupboards contain: (1) cleaning equipment; (2) top: dish towels, painted cans, and other decorative articles for the kitchen; bottom: linoleum exhibits; (3) top: table and cooking dishes used in kitchen exhibits; bottom: electrical supplies; (4) top: kitchen utensils; bottom: heavy kitchen utensils, and the canvas curtains used for setting up work centers in the laboratory; (5) skillets, extra shelves, and smocks and aprons. On the inside of the door of each section the students tacked an inventory.

discovered in any well-selected home that only the constructive angle of the situation needs to be discussed, unless the homemaker herself introduces the other aspects. Adverse criticisms made in class or by student groups outside of class might be passed on to homemakers indirectly, offending them and destroying all chances of working in homes. When students understand this and realize the unfairness and unkindness of such criticism of a home in which they have been welcomed, there is little danger of such a breach of hospitality. For this reason, the purpose of the visit should be discussed in advance of the trip as well as after. The student is then prepared to find what is of value and is guarded against being either too critical or too enthusiastic, depending on whether the homemaker possesses the kinds of things or uses the methods of which the student approves or which she has learned are right. Sometimes, if some example of management seems obviously bad, the instructor is able to question the hostess skillfully and bring to light the fact that the family had, after all, managed more intelligently in that instance than at first appeared. This policy of reserving criticism may mean passing up some good teaching opportunities, but it is preferable to running the risk of offending a hostess; and it does no harm for students to realize that they are using human textbooks that need to be studied with human understanding if they are to be of any value and if they are to be available.

It can be seen how important it is for the instructor of such a course to know as much as possible about the homes into which she takes her students, and to select them wisely for the special purpose for which she wishes them to function. She needs to have respect for the families she visits. She needs to recognize the contribution these families can make, not only to her students but to herself and to others in the community. She needs to know intuitively how far she can question without overstepping. If she has these characteristics, the attitude of her students will seldom be critical, and doors will be open to them. It is not a bad idea for a teacher who wishes to teach by this method to have a management conference on some problem of her own, and watch her own feelings as her students ask questions and offer suggestions. She may find herself on the defensive even though she recognizes that a student's suggestion is good and knows that the conference is merely an experiment.

A course in home management taught by this method will naturally be shaped by the opportunities which the community offers for getting into homes, by the needs of these homes, and by the supplementary teaching material available. The greater the variety of home management problems presented, the richer the course will be. It will rarely be taught twice alike. If the instructor is aware of her purposes in teaching and of the resources available, she can safely let the course develop from week to week, using the opportunities that arise. In any case the plans for the course need to be flexible enough to be changed at a moment's notice, when for sickness or some other reason a home visit has to be cancelled at the last minute.

The amount of class time to be devoted to home visits will depend upon the college curriculum and upon the extent to which other members of the teaching staff understand the course, see its relation to what they are teaching, and wish to cooperate. Occasionally a trip to a home conflicts with a class period in another course and adjustments need to be made. Under favorable conditions each student may have the opportunity to visit as many as eighteen or twenty homes in a semester. Under less favorable conditions she may visit fewer homes, but may go several times to one home or read other students' reports of homes visited. Because of the time required for coming and going, class periods for home visits are more satisfactory if they can be two, two and a half, or three hours in length. Again, the length of such class periods and the number in the term will depend upon individual conditions. A very good division of time for a one-semester course (3 hours' credit) has been to give each week 2 two-and-one-half-hour periods to visits and laboratory work, and 1 one-hour period to class discussion. As a rule, home visits are best put in the afternoon, since homemakers are better able to receive students at this time. It is important to have class periods for home visits long enough to make the visits worth while and at a time convenient to homemakers.

Obviously, student enrollment in such a course is best limited to a number easily accommodated in a home, and to the capacity of available transportation facilities. If the student registration is large, the class could be divided into sections and a student chairman chosen by each group. The teacher would have to make suitable home contacts, provide adequate source material, and work intensively with the chairmen. Such methods work successfully in extension teaching.

The instructor of such a course has her own management problems in arranging the time and space for teaching her class. Imagination, enterprise, determination, ability to cooperate, and a belief in the value of the undertaking are essential. The instructor who works out her own time and space arrangement and her own teaching material in line with what the situation offers is likely to be more successful than the teacher who tries to duplicate a method used in a totally different situation. To find time for necessary preliminary home visits is often a problem, and the teacher must use judgment in the amount of home visiting she undertakes to get the course under way. However, these home visits can be indirectly of great personal value to the instructor, for they will broaden her horizon and lead her outside the teaching circle. A teacher should not be deterred from trying this method of teaching because her facilities seem inadequate. Teachers using this method have found that the advantages far outweigh the difficulties.

Students, also, may not find it easy to arrange for the time to carry through the solution of problems on which they are working. In this case, assigned reading might be reduced to the minimum and a large amount of source material be made available to students. This will give them a chance to select with discrimination what is pertinent to their problem. In the long run, the result will probably be fewer facts and fewer arbitrary rules and standards stored in their heads and more ability to hunt up and use effectively any factual material they may need for a particular purpose.

Transportation of students to homes not within walking distance of the college is often a real difficulty. The best solution to this problem, so far, has been to charter a bus and collect a class fee to pay for the expense. Personal cars, even if available, cannot be used for hire, and the fact that all the tire wear must fall on the car owner is under present conditions a very real objection to their use. A fee of $10 per student a term will cover a good deal of mileage, and should even include one all-day tour. If, because of the war, transportation is not available, homes within walking distance of the school can be used.

In some schools, lack of time, money, and teaching staff seems to prohibit the teaching of such a course in home management even where several courses are given in the other branches of home economics. Since home management is an integral part of all other subjects in home economics and vital to the successful achievement of the values developed in the other courses, it seems important to include a course of this kind. Perhaps family economics and management courses might devote some time to class meetings in homes, or staff members of various departments might cooperate to give their students this opportunity, or homemakers might be invited to the school to discuss their home management problems with the class.

SUPPLEMENTARY TEACHING MATERIAL

Literature. Since the problems found in homes are so varied and so unexpected, students need access to a wide range of source material if they are to help solve these problems. A single text or even a fairly complete set of specialized reference material is insufficient. Investigation and experimentation are major activities in such a course, and these activities may take the student beyond the walls of the management laboratory and of the home economics building, even beyond the walls of the school or university. The questions asked by homemakers and the problems arising in different homes will indicate the types of books and magazines to which the students need access. These may be found in the college libraries, the reference books of the home management department, and in the public library. If not, a request may be made that they be ordered.

A file for student use is almost indispensable in teaching such a course (Fig. 209). Selected bulletins from other states, from the federal government, and from other organizations might be included in these files; also pictures and clippings from magazines, newspapers, and advertising catalogs. Selected student reports could be kept here for permanent class reference. It is important, however, that such source material be well selected and kept up to date. It is easy to overload a file with pointless or obsolete material. A class period devoted to evaluating printed material would help students to discriminate in the selection of material for the files. Class time devoted to looking up answers to questions asked by homemakers will help students to evaluate the files and to use them effectively. If money is not available for steel filing cabinets, inexpensive fiberboard ones may be obtained from mail-order houses or from a department or office equipment store. Even orange crates function successfully for this purpose.

Community Resources. Printed material is by no means the only, nor necessarily the best, source material for all purposes. A knowledge of community resources is important, and here the classified telephone directory and the chamber of commerce can be of help. Through these sources a student will be able to locate in her community the

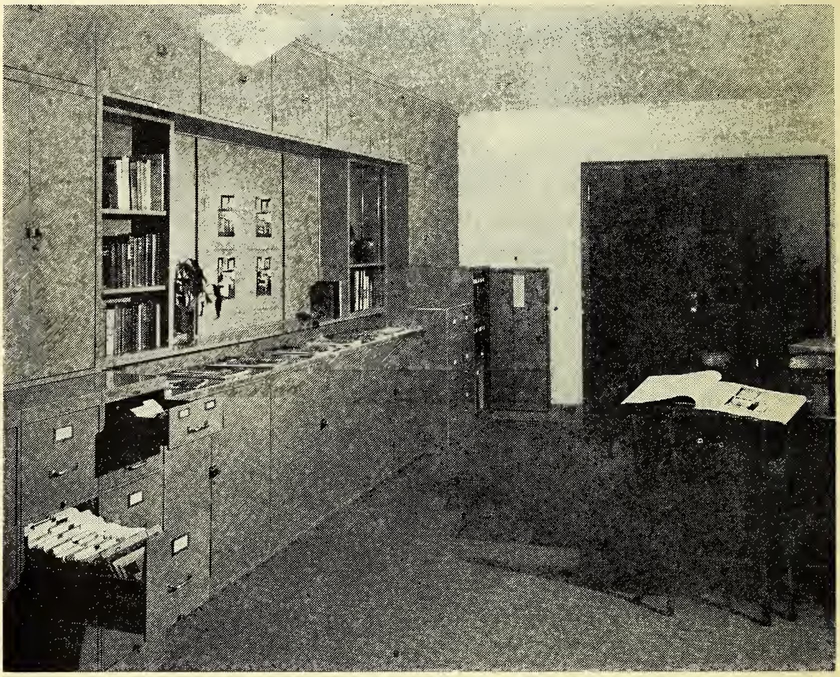


FIG. 209. Home management reading room showing student files. The cupboards above and the open shelves contain reference books, many of them the personal copies of staff members. Each book contains a card on which a student who wishes to draw out the book puts down her name, the date of withdrawal, and the date when she plans to return it. The student then files the card in the top file drawer. On returning the book she enters the date on the card and returns it to the book. Over a period of nine years only one book has been lost. All college books are duplicated in the library. Loose-leaf photograph books are shown in the far cupboard. These photographs have been made in the home management laboratory and in homes, schools, and community houses throughout the state in which home management specialists and teachers have worked over a long period of years. Students and community members refer to them constantly for ideas that they can use or adapt.

department stores, lumber mills, plumbing and heating establishments, paint and paper stores, and many other places where information may be secured for solving home management problems on which they are working.

Reports. Reports of family management experiences participated in by students in a course of this type can answer at least five major needs. First, they help the student who wrote the report to think through and gather the significance of the experiences recorded; second, they provide valuable teaching material for her own use later if she plans to teach; third, they remain as valuable reference material for future college classes; fourth, in the case of projects worked upon in homes, they leave with the family a record of suggestions considered feasible at the time of the class project so that the family can refer to these, sometimes years later, when they are ready to put the project into effect; and fifth, they give students practice in recording discriminatingly, accurately, clearly, and interestingly the material they wish to preserve. Students should be encouraged to type their reports if possible and to make one carbon copy for class use. The best of these class reports may be edited and bound or fastened into manila folders and filed for student reference. In the case of untyped single copies, a typed copy of any unusually good report could probably be made for the department. When students know that their reports may be used as reference material they are spurred to give their best literary efforts.

Letters from Homemakers. Home economics teachers and extension specialists in all state colleges, and high school homemaking teachers throughout the country, constantly receive letters and telephone and personal calls requesting information on all kinds of homemaking problems. These persons have a right to expect help from home economics teachers in their tax-supported schools. It is not uncommon for a teacher to spend many hours searching out the facts that will help to answer some woman's question, for naturally no college curriculum could possibly include all the factual material that may be needed in running a home. Even if it did and a teacher knew all the facts, they might cease to be facts tomorrow, as the world changes so fast. It is more important to be able to find information when it is needed than to be a living storehouse of knowledge pertaining to home economics. Replies to such letters can do one of two things: they can give merely the information requested, or they can help the homemaker see how to gather the information herself and adapt it to her particular problem. Certain types of questions can be answered by the first method; but unless the information is indisputable, letters answered by this method can do more harm than good. The second method is usually more fair and helpful, but it requires more ingenuity on the part of the instructor. Too often the instructor is so in the dark about the whole family situation that she can hardly give advice or even make suggestions. Skillful questions that lead the homemaker to think through the various aspects of her problem will often offer a happier solution. Not only will the question be answered in terms of the specific home situation but the homemaker will be better able to think through her own problems in the future.

Such letters from homemakers make excellent teaching material for college students. There is no better test of students' understanding of home management than the answers they make to such letters. Any tendency a student may have to talk down to these women or to pass on personal opinions offhand will be discovered and may be corrected. Often the requests are for purely factual material; here the student can be helped to recognize the importance of finding out the answer to the question. Other requests require further understanding of the situation than is given by the letter, or present a situation where the homemaker can be stimulated to work out her own problems. Here students can attempt to provide this stimulation. A few typical requests follow:

Will you send me any available information about planning work schedules, if you please? We have three children.

A Home Bureau member told me that you might be able to help me rearrange my kitchen so it would be handier, and I wish you could, for I don't know what to do with it. It is a large, dark, unhandy place. I am going to have it made smaller, and I would like to know where to put things in it. It will be like this: [diagram enclosed]. I have a large coal range that I use mostly for heating, four-burner oil stove, kitchen cabinet, and sink. Where would I want to place these so they would save the most steps, also where to put the north windows and a cupboard?

Will you please send me a pamphlet covering household management? I would like one that outlines a plan for keeping the house clean and still leaves one free for the sewing, cooking, baking, and ironing.

How can you clean gold leaf picture frames?

How can you remove iron stains from enameled sinks?

Must one be careful of using iodized salt in cleaning silver by the electrolysis method?

I would appreciate very much any information you can give me on kitchen equipment.

Can you tell me of anything to stop creosote from running? I have a kitchen chimney that leaks awfully. The pipe from the stove goes through the second floor into the chimney. I will greatly appreciate any advice you can give.

I have a large bedroom with wide floor boards and large cracks. I want to paint this. Is it cheaper to buy a commercial crack filler or to make my own? If you suggest the latter, can you give me a good recipe? I can buy a pound prepared for about 10 cents to cover 30 square feet of flooring.

The perforations in the coffee well of my percolator are badly filled up, and we would like to know what solvent to use to clean them out.

I would like to know if there is anything that would clean marble. Marble that has been up for a long time. I am a marble worker and have cleaned with soap that had no grease in it. But it does not take hold on old stuff. So if you could give me some information about same or tell me where I could get the information if your office cannot inform me. P.S. The marble I am referring to is interia polished marble.

I am convalescing from a prolonged illness, and am interested in knowing of material which I can read that would be helpful in simplifying my work for me, particularly housework (cooking secondarily) as I shall have low resistance and endurance for a while. A friend suggested that I write to you for suggestions. I should like to know of household articles that would help, also. I am in moderate financial circumstances, but sometimes I feel sure that what seems like an expensive purchase is not in the long run, because of time and energy saved. I am interested in anything that will make me a more efficient person. I shall be grateful for any suggestions or literature you have to offer, or book recommendations.

Photographs. Photographs of successful household arrangements in actual homes are exceedingly valuable. Documented by pertinent explanatory legends, they are almost as effective teaching material as a visit to the home itself. Photographs may be taken of a single clever device, or of a large-scale completed successful arrangement in a home, or a series of pictures may be taken showing the different steps of a procedure. As the number of photographs increases, the danger of their loss or damage rises. For use in resident teaching it has been found feasible to file these, or mount them with legends and

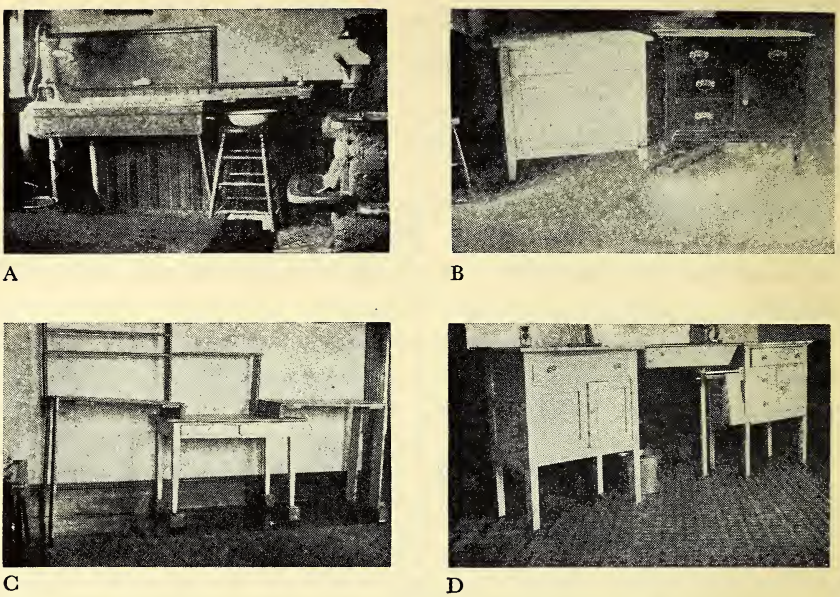


FIG. 210. Photographs taken by a Home Demonstration Agent with a small, inexpensive camera. While not as good as those made by a professional, they tell a story and have been useful teaching material. A. An unhandy corner sink in a large farm kitchen; the pump is on the only possible counter space at the left of the sink. B. The family decided to move the sink. They purchased these washstands at a country auction for $1.50 apiece. C. The woman's husband put up this substitute sink center in the woodshed, where she used it for two months in the summer. D. The old sink has been kept, the washstands have been raised to the right height for the homemaker, the pump has been reinstalled. The total cost of the whole improvement was $9.

bind them in loose-leaf notebooks (Fig. 209). Large 8- by 10-inch photographs, while they give better detail, are expensive. In most cases small ones made with a home camera tell the story equally well (Fig. 210) and are cheaper. It is the content, rather than the size of the photograph, that is important.

Such photographs have a wide variety of uses. As different homes are visited, many clever conveniences, often made by family members, are discovered that might be useful in other homes. Pictures of these arrangements taken to a home management conference will stimulate ideas or suggest a way to solve a related problem. They can be loaned to families needing guidance in the details of some desired arrangement or convenience. They can be available in the home management laboratory for families planning to build or remodel, and for builders, architects, and manufacturers who are searching for ideas that will make their products meet more nearly the needs of homemakers. They can be used in exhibits. If money permits, they can be made into film strips or lantern slides for use with large groups. As such photographs accumulate from year to year, they show, beyond dispute, that there is no one way to manage successfully.

Constructed Models. To supplement photographs as a medium for disseminating good ideas, models of clever devices can be constructed (Fig. 211). These models can be used in the laboratory or the classroom, and if not too large can be carried to homes. Depending upon the situation, such equipment can be made by the instructor or her students, by a student assistant or a boy from the shop class, by a big-hearted member of the community, or, most expensive of all, by a hired carpenter. After a period of years, a priceless set of teaching material of this nature will be assembled. The storage of these rather bulky devices may offer a problem. But what better problem for a management class to sharpen its wits upon than just this?

It is a great help, whenever possible, to have a workshop or the use of one available to students (Fig. 212). This need not run into a

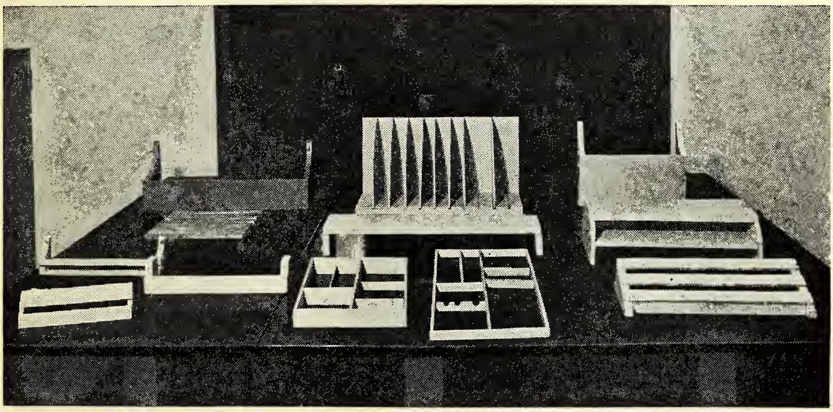


FIG. 211. This is a collection of construction models that can be copied or adapted to different situations. Here are shown, from upper left to right, back row: shallow rack for closet door or wall, file for flat pans, deep rack for door; second row: rack to raise dishpan, supplementary cupboard shelf for small articles, supplementary shelf for platters; front row: three racks for small articles on cupboard doors, two sections for partitioning drawers, rack for door or wall. These can be packed in a carton and taken to homes in which projects are under way, or can be loaned to schools, communities, and families that wish to learn the methods of construction.

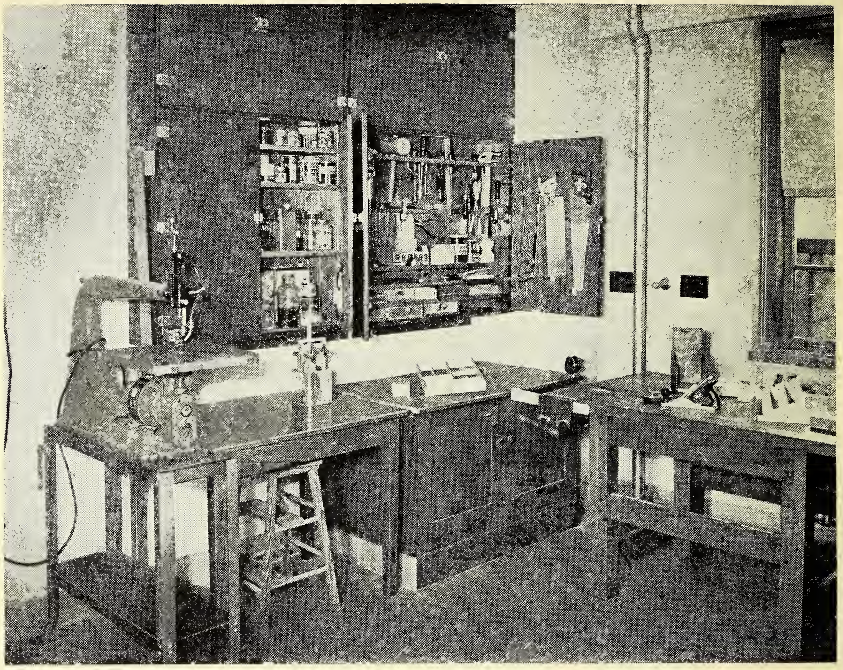


FIG. 212. Home management laboratory workshop with one set of family tools, workbench, power saw, table, and cupboard for paint supplies. Note the device for keeping paintbrushes suspended in oil or turpentine. Students sign up for work periods and check out the tools they use. The power saw will cut two-by-four boards.

great deal of money. Simple inexpensive household tools can be purchased at ten-cent stores, mail-order houses, or hardware stores. The greatest problem would probably be to find a place for such a shop. If a workshop is not available, an instructor or a student from the woodworking class, or a local carpenter or a handy man in the community, might be willing to give a talk to the home management students on the selection and use of household tools. With this as a stimulus, the students could go home and persuade their fathers, their brothers, or their boy friends to help them make some needed device, or they might experiment by themselves. A number of excellent, simply written books on woodworking are available. Some schools offer courses in woodworking to girl students. Certainly, skill in the use of tools is a resource that could be used by women much more than it has been; in point of fact, the war has already made proficiency with tools a matter of pride to women.

Life-Size Cardboard Equipment. The most valuable — and most ambitious — project of any is to duplicate the homemaker's work center to scale. When a homemaker is plagued by an inconvenience in some part of the house, a student conference may be held in that room and suggestions may be made for solving the problem. But suggestions are not always convincing. The homemaker cannot test proposed changes in arrangement, because the major equipment is usually fixed; nor can she readily visualize its rearrangement, or get a mental picture of a moved partition or some other structural change. And what she cannot visualize completely, she cannot judge adequately. Duplicating that room or work center to scale, with portable walls and makeshift equipment, has been the answer to many a homemaker's prayer.

This may be done by various methods. Essential is a space large enough to lay out the room to scale and leave room for the class. This space may be found in the classroom, the laboratory, a grange hall, a church parlor, a barn, a garage, or simply in a dooryard. The next essential is to assemble makeshift equipment the size and shape of the homemaker's, and light enough to be easily moved from place to place. This life-size equipment gives the feeling of height and bulk that cannot be obtained by small-scale plans. Packing boxes, cartons, orange crates, tables, or anything else of the right shape and size can be used. Paper cartons fastened together with paper clips or gummed tape and pared to the correct size are satisfactory (Fig. 213). Orange crates piled on top of each other for height and topped with a piece of cardboard the size of the surface represented will give the

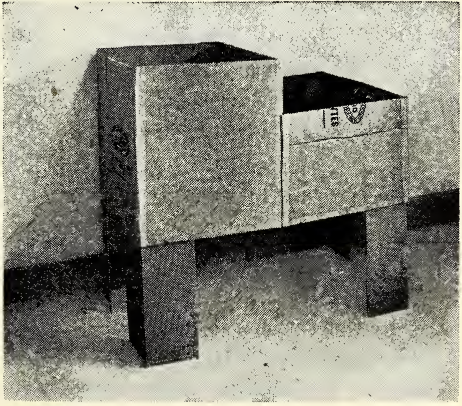


FIG. 213. This stove is made from two empty cartons cut to the correct size, fastened with paper fasteners, and reinforced with gummed paper tape. This model is collapsible; the fasteners can be removed, the top folded together, and the legs flattened out. It can be stored in a small space and carried conveniently in an automobile.

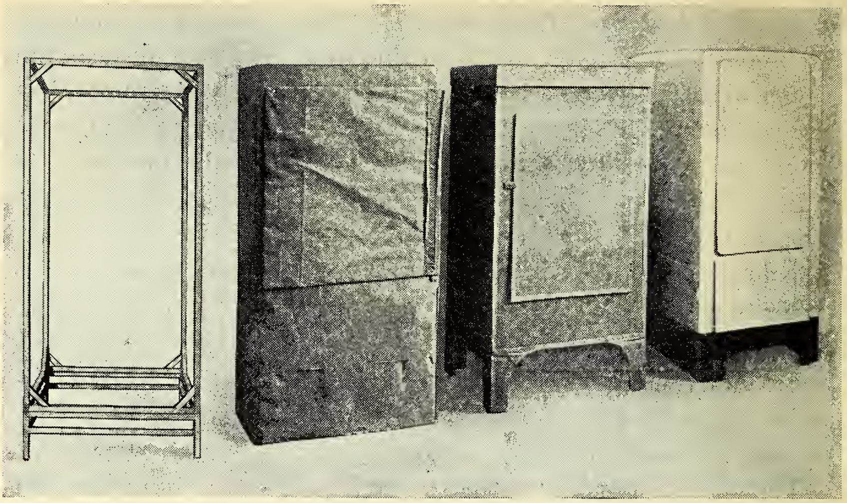
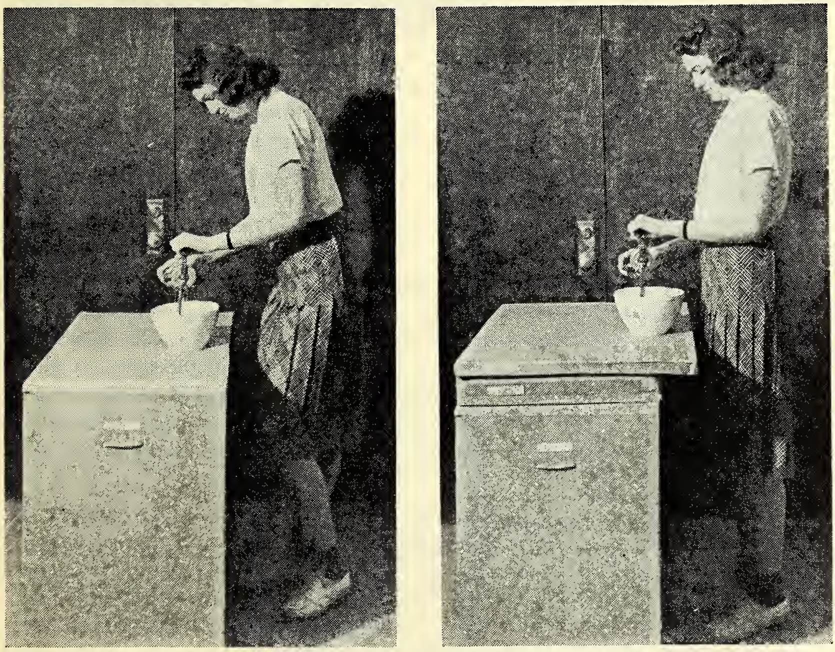


FIG. 214. Refrigerator model B was made by fastening together paper cartons cut to the right size and shape, and covering the whole with brown paper. C was made by covering frame A (made of one-inch strips of wood) with corrugated cardboard purchased at an office supply store for about 15 cents a sheet. The edges are protected by paper tape. D was made by the same method as C, but more attention was given to detail and it was painted; this last model seemed too costly and time-consuming to be practical. The pieces most useful to simulate are refrigerator, stove, and sink.

idea of a counter and can be moved around. For greater realism, more finished products can be made of corrugated board and gummed tape, and if properly cared for will last a long time (Figs. 214, 221). Since equipment in different homes varies in size, it is a good idea to build up such a set in the smaller sizes most commonly in use, and make any variation in size by setting pieces as far out from the wall of the room as seems necessary, or by using top surfaces of different sizes. Heights can be altered by using counter-tops of different thicknesses or by raising a top piece of cardboard by putting objects of the correct thickness underneath (Figs. 215, 216). Building up such a set of equipment could be a long-time project. A start could be made by making first the piece of equipment most difficult to simulate by other means (Fig. 217). Each year, or as money permits, other pieces could be added. Students are clever in devising make-shift equipment.

The storage of this life-size equipment may offer a problem. In that case, collapsible equipment can be constructed that can be folded up and stored in a small space (Figs. 217, 218). The collapsible equipment may look slightly less finished than does the other; but since it is easy to carry about, it is more useful in situations where the school has to go to the community, or in an unfurnished house or room where different arrangements can be tested under actual home conditions.

Canvas Walls. Side walls help to make the room still more realistic (Figs. 219, 220), but are a more ambitious undertaking. If the room is put within another room, adjoining walls can represent two of the walls and possibly screens can be used for the other two. A satisfactory method of simulating walls is by the use of gas pipes and canvas curtains (pp. 87, 118). The pipe is cut in various lengths and put together with unions to form a frame, and this frame can be supported by iron standards such as are commonly used for police signs. Canvas strips, hemmed at one end to slip over the horizontal pipe at the top, simulate walls; and windows and doors cut to scale from paper can be pinned to these walls. If one wishes to carry this further, wall cupboards can be made of cardboard and suspended from the top



FIGS. 215 (left), 216. This 30-inch counter is obviously too low for the student using it. Separate tops of different thicknesses raise the counter until she assumes a correct posture. Fig. 230 (p. 285) shows a more elaborate test for working heights.

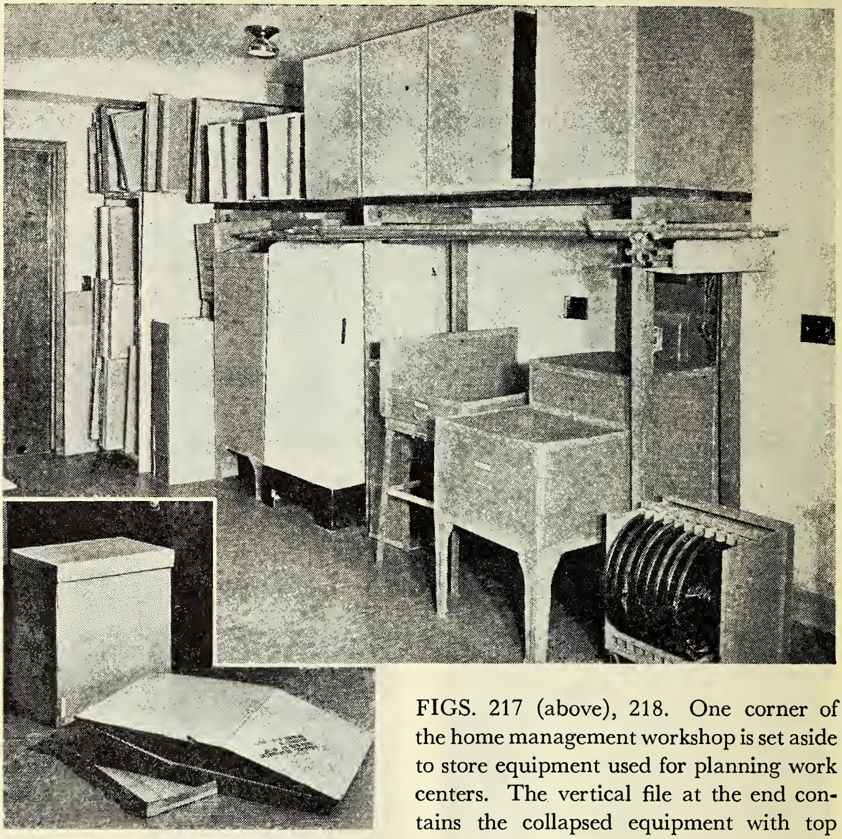


FIG. 218.

FIGS. 217 (above), 218. One corner of the home management workshop is set aside to store equipment used for planning work centers. The vertical file at the end contains the collapsed equipment with top pieces and counter tops. Rope handles on the rigid pieces make it possible to pick them up and carry them easily; dragging tears them apart. Curved iron bars fastened to the wooden rack form a convenient storage space for the long gas pipes that make the framework on which canvas curtains are hung to simulate a room. Short pipes and unions used for splicing are kept in the wooden rack at the right. A file on wheels, lower right, contains the heavy iron police-sign standards which support these frames; this file can be easily rolled to the places in the laboratory where the standards are to be set up. Fig. 218 shows how the cover will keep the collapsible box rigid.

pipe by coat hangers bent to the right shape. If pipe cannot be obtained, uprights nailed to Christmas-tree supports can be slotted at the top to receive round poles upon which the curtains can be hung.

Wall Panels. For permanent exhibits, wall panels made of plywood or wallboard and fashioned in different widths can be bolted together to make a room. Canvas can be stretched for a ceiling. In such a

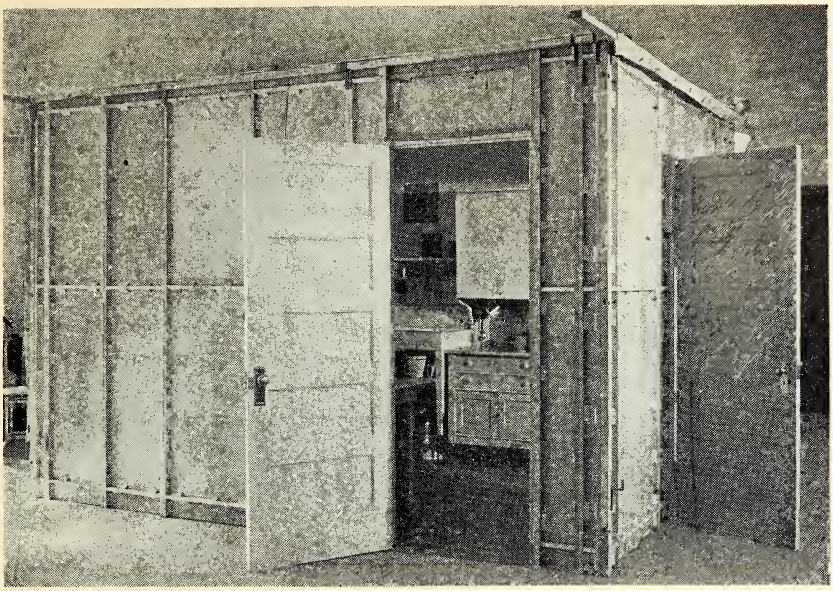


FIG. 219. Room set up in the laboratory with plywood panels fastened together by bolts and wing nuts. The walls are braced by two-by-fours which rest in angle-irons at top and bottom. Door and window panels can be installed where needed. Canvas stretched across the top forms a ceiling. This room is wired, and gas and water can also be installed if desired. Note the cupboard made from a washstand.

substantial material permanent panels can be made with windows and doors inserted, and the room can be wired, equipped, and furnished as desired. It is convenient to have narrow corner panels permanently fastened together. Figures 219 and 220 show such a room set up in the laboratory. The second is the more elaborate; double walls make the outside available as a bulletin board.

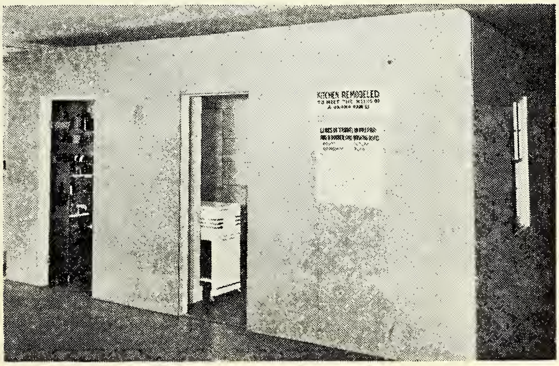


FIG. 220. Another room to the outside of which wallboard has been fastened. This gives a finished appearance and serves as a bulletin board.

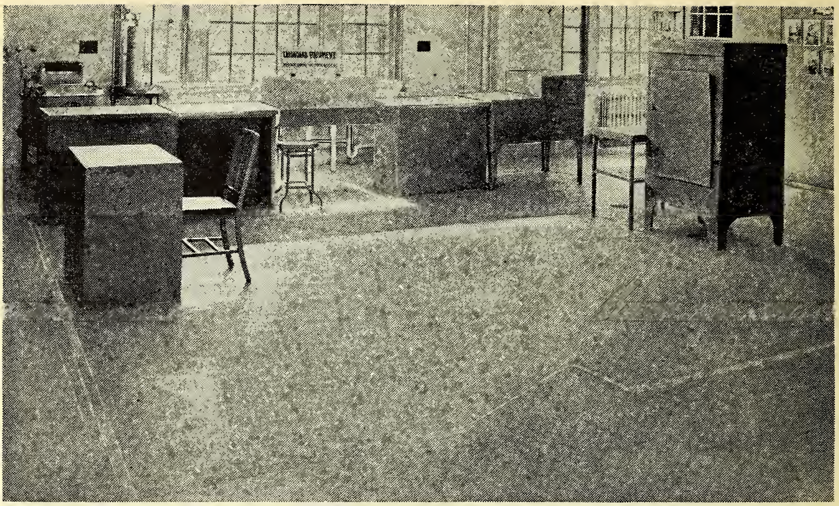


FIG. 221. In Figs. 221–227 is shown the evolution of a kitchen from the laboratory to the room in the owner's home. A homemaker worked with the home management class, and her kitchen was chalked out in actual size on the laboratory floor, as shown above. Cardboard equipment was arranged in different ways and tested for convenience by the homemaker, who walked out the process of doing her work in each arrangement. The plan shown was the one which the homemaker finally adopted.

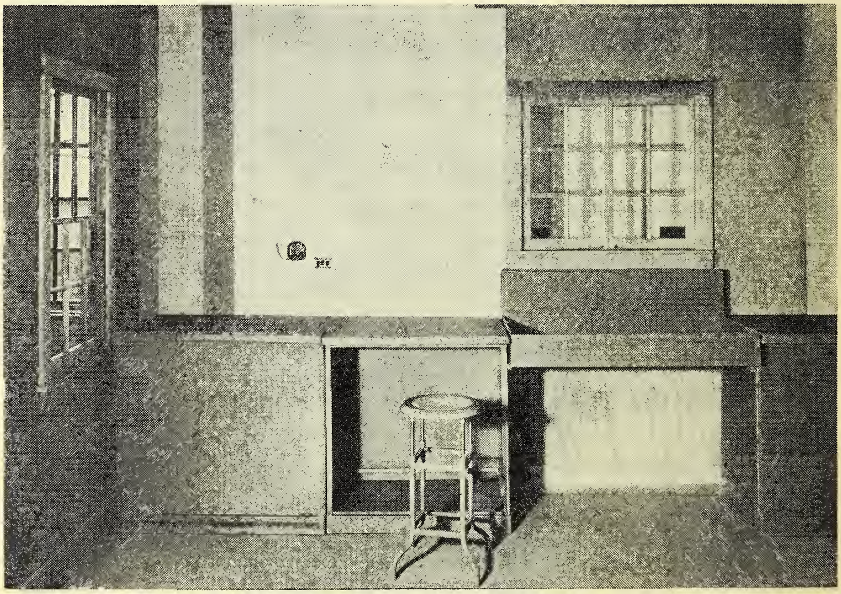


FIG. 222. In FIGS. 222 and 223, the same room is shown as in Fig. 221, but set up to scale with plywood panels. The windows and doors have been inserted, the electric wiring has been installed, and the cardboard equipment has been put in place.

Figures 221 to 227 outline the development of such a project. In the first place (Fig. 221), the room is chalked on the laboratory floor, and life-size cardboard equipment is used to test out the best positions for the main equipment. Second, because this room was to be kept as an exhibit, it was set up to scale in plyboard panels; the windows and doors were inserted and the cardboard equipment put in place. One side of this room is shown in Figs. 222 and 223. Later, equipment corresponding to these cardboard pieces was borrowed from a local store and set into place, as in Figs. 224 and 225. These cupboards were a standard make with fixed shelves, and extra shelves were inserted to make the cupboards fit specific equipment. Figures 226 and 227 show the real home kitchen after it was finished and the final, personalized touches added.

This is an elaborate setup. It runs into a good deal of money and is dependent upon the cooperation of local merchants in lending equipment. However, inexpensive equipment can be used as in Fig. 228,

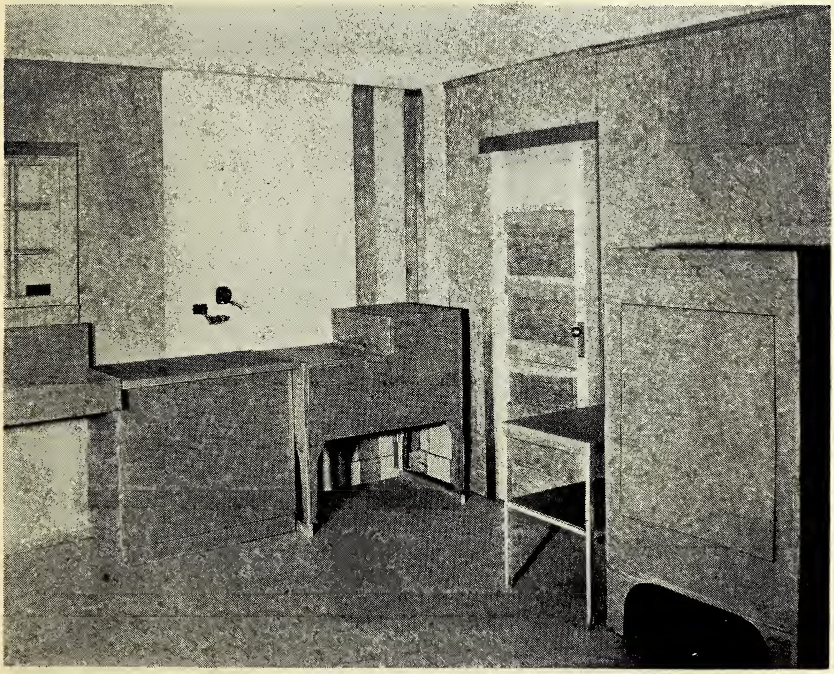


FIG. 223. This is the extension of Fig. 222. On the following page the room is shown as planned in Fig. 221. In Fig. 226 the actual kitchen is shown as it was built into the owner's house. In Fig. 227 the owner's cupboards are shown in detail.

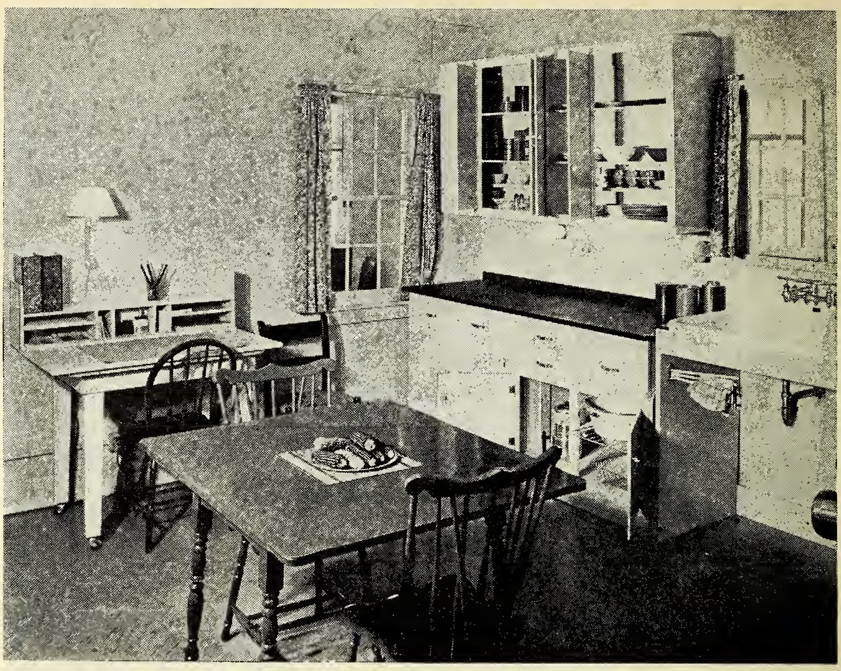
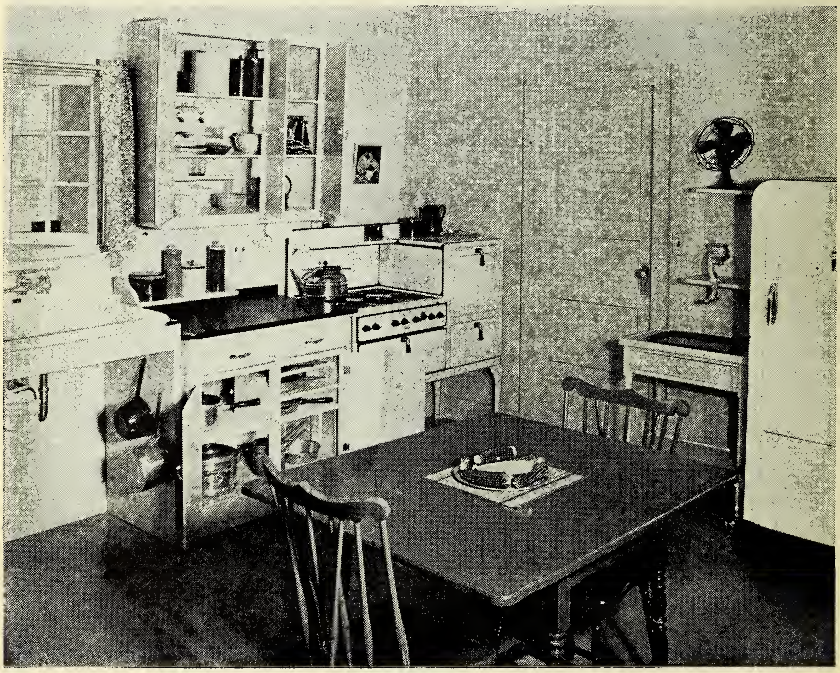


FIG. 224 (above), FIG. 225 (below).



FIGS. 224, 225. On the opposite page is the kitchen as set up in the laboratory. T stove, refrigerator, and sink were loaned by manufacturers and dealers. The serv wagon beside the refrigerator was made from a second-hand washstand and equipp with rubber-tired swivel wheels. The sink was placed in a wooden frame for stabili The top part of the planning center was designed by students and made by a c penter; it rests on a second-hand table that cost $1. The room was completely wi by the building engineer. Notice good lighting at planning center and counte the switch at the right of the sink turns on a light over the sink. Help in selecti the color scheme was given by a member of the household art department. Stude did most of the painting. Since the standard cupboards had stationary shelv detachable shelves were set in to give more convenient space for dishes and utens

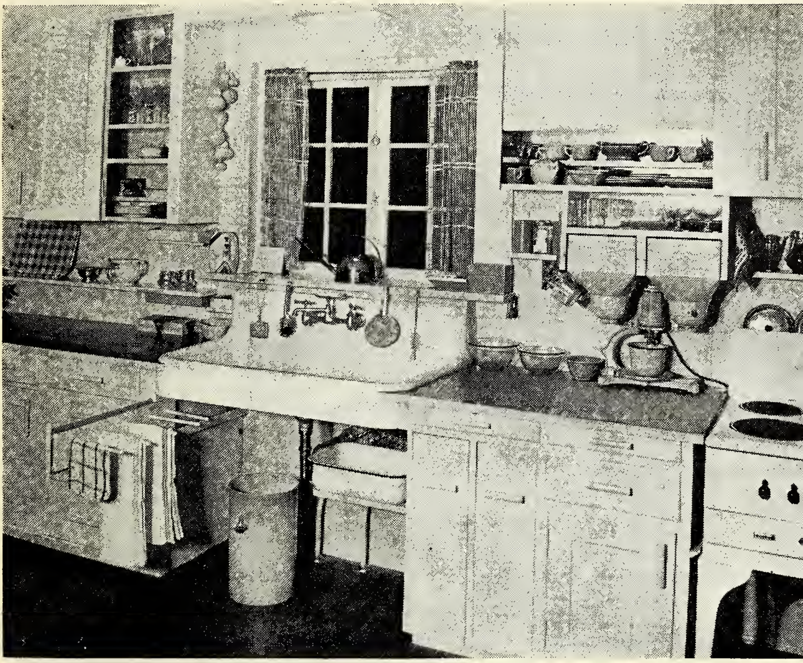


FIG. 226. Above and on the following page is the completed kitchen in the home which it was planned. The general arrangement is the same as in the laborato kitchen, although much of the detail is of necessity different. Notice the space kettle covers back of the stove and the narrow shelf above. Flour and sugar b were purchased separately and installed by the cabinetmaker who built the cupboa to specification. Notice the window shade over the shelves at the left of the sto The dishes below are those used daily. The sink, which was narrower than counters, was placed forward, and in the ledge covering the space at the back b were constructed for soap flakes and water softener; the small hinged covers shown open. The dishtowel rack, which pushes under the sink, and the drav and door handles were designed and constructed by the homemaker's husba

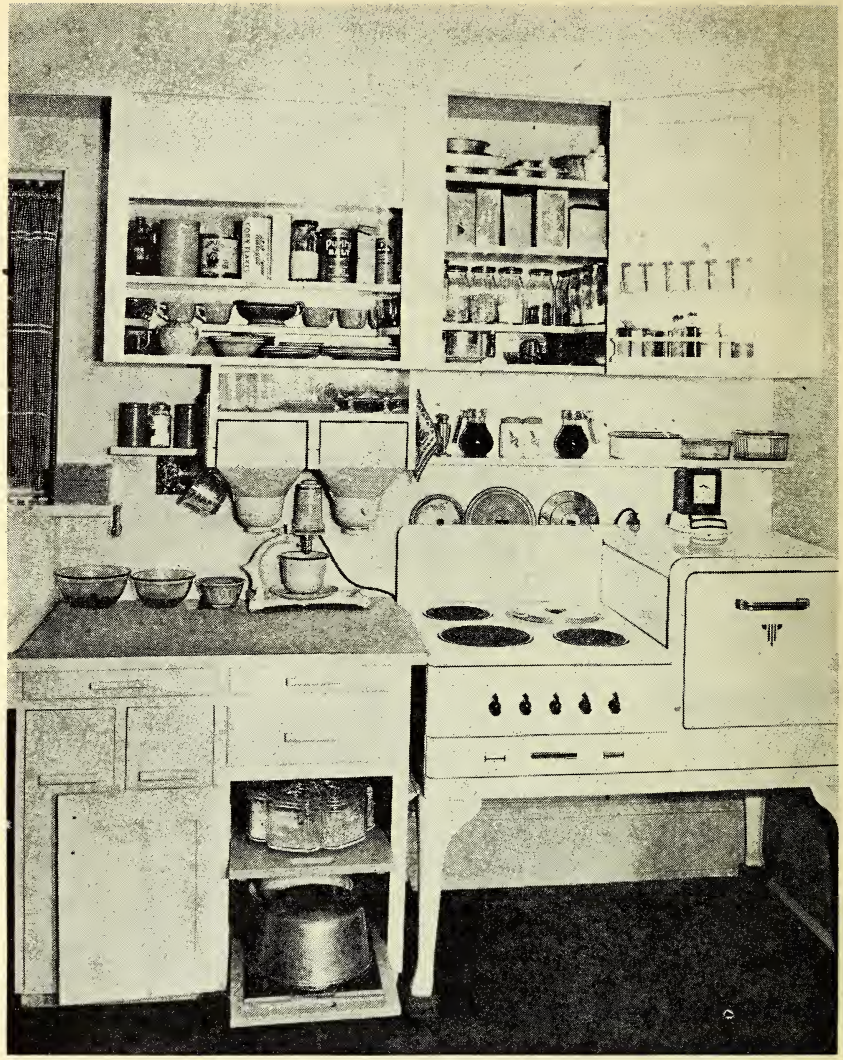


FIG. 227. The individualized detail in the kitchen (Figs. 221–227) is worth special attention. The window shade on the left-hand cupboard is set within the closet, so that it hangs trim and will not flap. The dishes are those used for breakfast. The second shelf in the right-hand cupboard is cut back to take one row of jars for staples. The door racks are compact and keep their contents safe. The flour and sugar containers are placed to allow the mixer to slide in between. Kettle covers rest on the back of the stove. In the lower cupboard, both shelves slide out. The bottom one holds large heavy kettles, the one above has fixed into it a "lazy Susan" which spins to put the triangular glass containers within reach. On the window sill can be seen (left of the file box) the white handle of the soap container inserted into the sill.

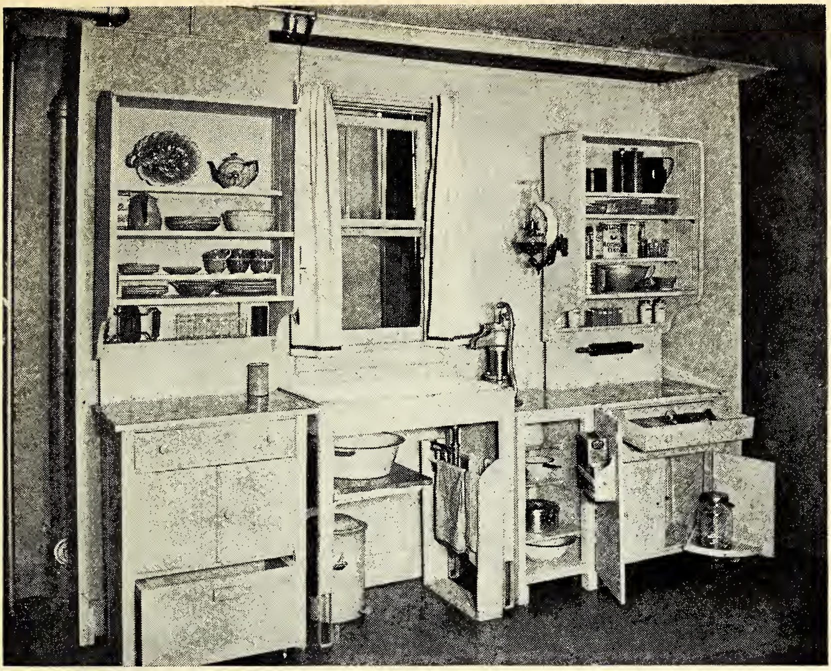


FIG. 228. This dishwashing center exhibit takes seven panels. It shows a sink center without electricity and running water made convenient at little or no expense. The $5 enameled iron sink is mounted in a frame for ease in moving and is equipped with adjustable legs. The placing of the pump on the small cupboard at the right leaves room for stacking dishes without interfering with the pump handle. The base cupboards are made from second-hand washstands. The drawer under the left cupboard is equipped with casters and used for storing vegetables. The lamp with a reflector throws the light down to the sink. The upper cupboards can be equipped with shades.

in which the lower cupboards are made of second-hand washstands which cost $1.50 apiece, and the shelves above can be covered by window shades instead of doors. The sink, which cost $5, was placed in a frame with adjustable legs for ease in changing the height. These more substantial pieces are most practical for an exhibit that is to be kept for a year or so. With such sturdy but adjustable walls a different arrangement could be exhibited each year, again demonstrating that there is no "model kitchen" or any one right way to plan a work center. The value received over a number of years might well justify the initial cost. The expense could, however, be spread over a number of years. Perhaps the first year only enough panels for one wall need be made and just one work center exhibited, such as a sink center (shown in Figs. 228 and 229), a mixing center, or a cooking center. More could be added each succeeding year, until finally enough would be on hand to set up any room desired.

While this sturdy panel construction can be recommended for exhibition purposes, the pipes and curtains are more practical for experimental work. They are cheaper, and they are more quickly and easily handled. On the other hand, although it does not take much time to set up the pipes, they are heavy and awkward for girls to handle without the aid of a janitor or a boy assistant.

Equipment for Testing Working Heights. A most necessary device is one to help the student or homemaker find her most satisfactory working height for different tasks. This can be a series of shallow plat-

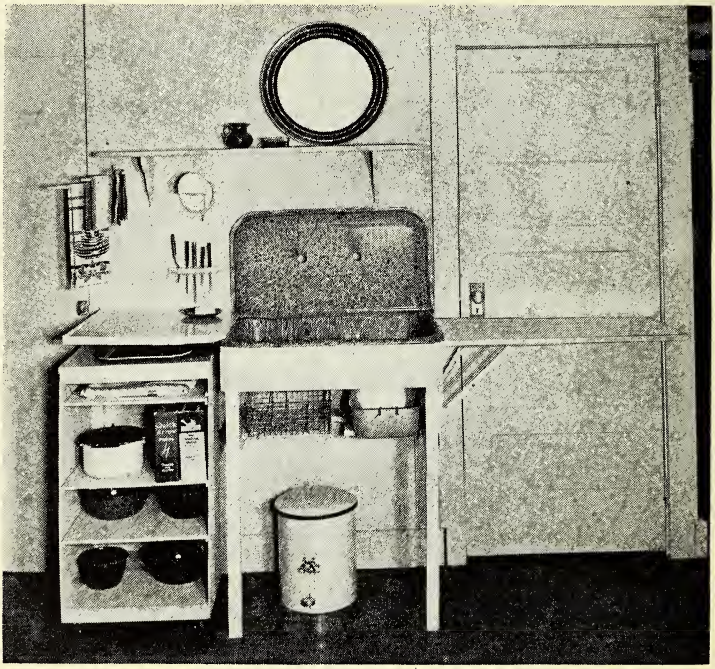


FIG. 229. Three panels are used in this exhibit, which is intended to show how a convenient sink center can be built around a sink between two openings. The drop-shelf at the right forms a place to stack dishes and can be lowered when not in use. The open cupboard on casters at the left can be pulled out when extra counter space is needed. The gray granite sink fits in well with the red, white, and blue color scheme. Drain basket and dishpan are convenient and inconspicuous under the sink.

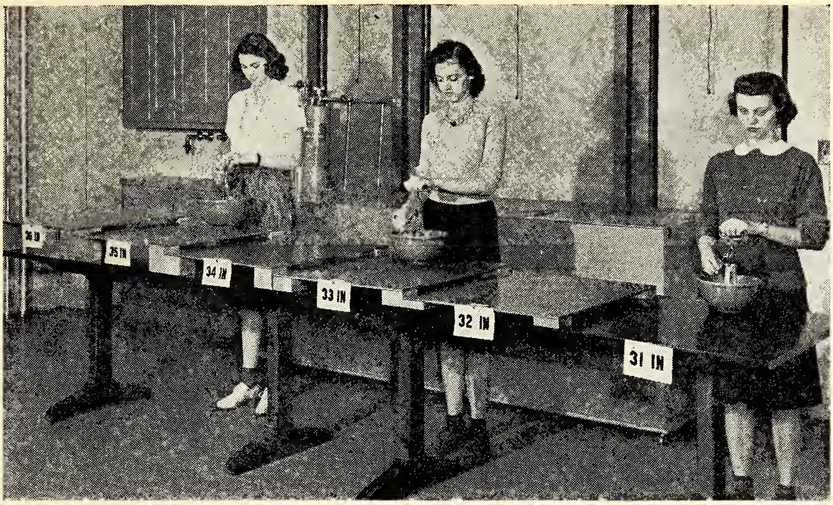


FIG. 230. Plywood platforms varying one inch in height are used for determining the best height for such operations as beating, kneading, rolling, ironing, cutting out garments, washing dishes, etc. It has been found that for good posture and comfort two or three different working heights are desirable in a kitchen. These heights need to be determined by actual testing, and can be easily tested in any kitchen.

forms (Fig. 230) varying one inch in height and large enough to accommodate the equipment required for such tasks as dishwashing, ironing, mixing, beating, kneading, rolling, cutting out garments, and the like. These can be placed on a table and the homemaker may try out different heights for each task until she finds the one most comfortable for her. If such platforms are not possible, other less expensive equipment can be substituted, such as pieces of heavy cardboard laid on blocks of wood of different thicknesses. Boards or blocks under chair legs or tables, cheap pads to raise a stool or chair seat, a foot rest of the right height to let the feet rest flat — these are all inexpensive and available devices to adjust seats to comfortable working heights. Cushions or sliding chair backs can make seats adjustable for comfort.

The development of a course in home management in which human textbooks and real problems are studied is possible, it is challenging, it grows from year to year, it is fascinating, and it is fun. Students enjoy such a course, homemakers enjoy it, teachers enjoy it, and all benefit by it.

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